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(54) Title: NUCLEIC ACIDS, PROTEINS, AND ANTIBODIES

(57) Abstract: The present invention relates to novel immune/hematopoietic-related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "immune/hematopoietic antigens", and the use of such immune/hematopoietic antigens for detecting immune/hematopoietic-related diseases and/or disorders, particularly the presence of cancer and cancer metastases of cells of hematopoietic origin. More specifically, isolated immune/hematopoietic associated nucleic acid molecules are provided encoding novel immune/hematopoietic associated polypeptides. Novel immune/hematopoietic polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human immune/hematopoietic associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the immune system or cells and tissues associated with hematopoiesis, including cancers of cells of hematopoietic origin, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

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## **Nucleic Acids, Proteins, and Antibodies**

[001] This application refers to a "Sequence Listing" that is provided only on electronic media in computer readable form pursuant to Administrative Instructions Section 801(a)(i). The Sequence Listing forms a part of this description pursuant to Rule 5.2 and Administrative Instructions Sections 801 to 806, and is hereby incorporated in its entirety.

[002] The Sequence Listing is provided as an electronic file (PC004PCT\_seqList.txt, 76,977,474 bytes in size, created on January 16, 2001) on four identical compact discs (CD-R), labeled "COPY 1," "COPY 2," "COPY 3," and "CRF." The Sequence Listing complies with Annex C of the Administrative Instructions, and may be viewed, for example, on an IBM-PC machine running the MS-Windows operating system by using the V viewer software, version 2000 (see World Wide Web URL: <http://www.fileviewer.com>).

### ***Field of the Invention***

[003] The present invention relates to novel immune system and hematopoietic related (herein "immune/hematopoietic") polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "immune/hematopoietic antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such immune/hematopoietic polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the immune system, including, but not limited to, the presence of cancer and cancer metastases of cells of hematopoietic origin. More specifically, isolated immune/hematopoietic nucleic acid molecules are provided encoding novel immune/hematopoietic polypeptides. Novel

immune/hematopoietic polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human immune/hematopoietic polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to hematopoiesis and the immune system, including cancers of cells of hematopoietic origins, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

### ***Background of the Invention***

[004] The immune system is an intricate network composed of cells, tissues and soluble substances that function to protect the body from invasion by foreign substances and pathogens. The major cells of the immune system are white blood cells, including lymphocytes, such as B cells and T cells, and myeloid cells, such as basophils, eosinophils, neutrophils, mast cells, monocytes, macrophages and dendritic cells. The soluble components of the immune system, are molecules (often polypeptides) that are not contained within cells, but rather are found in extracellular fluids such as lymph and blood plasma. Some of the major soluble substances are antibodies, complement proteins, and cytokines.

[005] Cells of the immune system (as well as red blood cells and platelets) are derived from a common precursor stem cell by a process known as hematopoiesis. During fetal life hematopoiesis occurs in the liver and spleen, but in the adult, hematopoiesis occurs mainly in bone marrow. The stem cells from which all blood cells are derived proliferate and differentiate into the various blood cell lineages, (e.g., lymphocytes (B or T cells), myeloid cells (basophils, eosinophils, neutrophils, mast cells, macrophages), platelets, or red blood cells) in response to signals received from other cells (e.g., stromal cells) in the bone marrow microenvironment and also from cytokines. Many of the cytokines that promote the growth and differentiation of



hematopoietic stem cells are known as "colony stimulating factors". For example, interleukin-3 (IL-3, and also known as multi-colony stimulating factor) and granulocyte macrophage colony stimulation factor (GM-CSF), which are released by activated macrophages T cells, stimulate the production of macrophages and granulocytes (myelopoiesis). Stem cell factor (SCF, c-kit ligand) is a growth factor for primitive lymphoid and myeloid hematopoietic bone marrow progenitor cells expressing the early cell surface marker CD34. Other hematopoietic cytokines/growth factors include, but are not limited to macrophage colony stimulating factor (M-CSF) and granulocyte colony stimulating factor (G-CSF). Interleukins-1, 6, and 7 have also been shown to function as hematopoietic growth factors/cytokines.

[006] The maturation of lymphocytes has an added layer of complexity in that each individual T and B cell generates a unique antigen specific receptor – a B cell receptor (antibody) in the case of B cells or a T cell receptor in the case of T cells . Because it is possible that B and T cells may generate autoreactive antigen receptors, B and T cells undergo negative selection processes that eliminate autoreactive lymphocytes from the circulating pool of mature lymphocytes. Defects in negative selection may contribute to the occurrence of autoimmune disease. In addition, T cells undergo a process of positive selection in which T cells are selected for their ability to interact with the major histocompatibility antigens. In the thymus, T cells also differentiate into one of two classes, CD4+ T helper (Th) cells or CD8+ cytotoxic T cells. The majority of the maturation and selection process occurs in the bone marrow for B cells, whereas T cell progenitor cells migrate from the bone marrow to the thymus where they complete their maturation.

[007] Cells of the immune system circulate throughout the body in both the lymph and the blood. Immune cells will leave the circulatory system and enter the tissues by a process known as diapedesis. Immune cells return to the circulatory system via travel in the lymph. Situated along the lymphatic vessels are lymph nodes, which are small nodular aggregates of lymphoid tissues. The architecture of the lymph node is designed to facilitate acquired immune responses, with antigen presenting cells, B cells and T cells all in close proximity. Antigen presenting cells (APCs, e.g., dendritic cells, macrophages, B cells) display antigen on their surface in the form of peptides associated MHC class II molecules to T helper cells. T helper cells with T-cell

receptors specific for the given antigen become activated if they bind to the peptide MHC complexes and receive co-stimulatory signals (e.g, stimulation of CD28 on the Tcell by B7 molecules on the APC). Activated T helper cells proliferate, secrete cytokines, and can stimulate antigen-specific B cells or T cells to become activated. Once activated, cytotoxic T cells proliferate and are able to induce apoptosis of cells expressing specific antigen on their surface as a peptide in the context of MHC Class I molecules. Activated B cells also proliferate and may either enter into germinal center and undergo a process of affinity maturation of their antigen receptor, or differentiate into antibody forming cells (plasma cells) that secrete large quantities of antigen-specific antibody.

[008] Aside from lymphocytes and antigen presenting cells, introduced above, there are several other accessory cells in the immune system including neutrophils, eosinophils, basophils, mast cells, and Natural Killer (NK) cells. NK cells are large granular lymphocytes that have cytotoxic function, especially against cells infected with intracellular pathogens, and may function in the eradication of cancer cells. Neutrophils are phagocytic cells that play a key role in the inflammatory process. Activated mast cells release granules containing histamine and other active agents which are effective against large parasites and also contribute to allergic reactions and asthma. Eosinophils bear Fc receptors for IgG and IgE, and participate in the killing of antibody coated parasites.

[009] The immune system can be classified into the acquired and innate immune system. The cells of the innate immune system (e.g., neutrophils, eosinophils, basophils, mast cells) are not antigen specific and their action is not enhanced by repeated exposure to the same antigen. The cells of the acquired immune system (B and T cells) are antigen specific and repeated exposure of B and T cells to an antigen results in improved immune responses (memory responses) produced by these cell types. The cells and products of the acquired immune system can function to focus the action of the innate immune system. For example, eosinophils are not in themselves antigen specific, but as a result of expression of Fc receptors on their surface, their activity can be focused on a specific antigen to which an antibody response has been made by the acquired immune system. For a more extensive review of the immune

system, see *Fundamental Immunology*, 4th edition, ed. William Paul, Lippincott-Raven Pub. (1998).

[010] As illustrated above, an immune response is seldom carried out by a single cell type, but rather requires the coordinated efforts of several cell types. In order to coordinate an immune response, it is necessary that cells of the immune system communicate with each other and with other cells of the body. Communication between cells may be made by cell-cell contact, between membrane bound molecules on each cell, or by the interaction of soluble components of the immune system with cellular receptors. Usually, such receptors are embedded in the plasma membrane, but there also exist a subset of cytoplasmic and nuclear receptors. Communication, or signaling, between cell types may have one or more of a variety of consequences including, activation, proliferation, differentiation, or apoptosis. Activation and differentiation may result in the expression or secretion of polypeptides, or other molecules, which in turn affect the function of other cells and/or molecules of the immune system.

[011] Signaling molecules of the immune system, including not only cellular receptors and ligands, but also the downstream effectors of the receptors and/or ligands, may be described as immunomodulators. In addition, immunomodulators (also known as biological response modifiers) include microbial or synthetic substances and products of activated cells. The mechanism of action of immunomodulators usually involves a complicated interplay of various regulator and effector systems. Immunomodulators may enhance (immunoprophylaxis, immunostimulation), restore (immunosubstitution, immunorestitution) or suppress (immunosuppression, immunodeviation) immunological functions or activities. Immunomodulators may be, for example, cytokines, cytokine receptors, inhibitors of DNA synthesis, intracellular receptors, or components of signal transduction pathways, some of which are described in more detail below:

#### *Cytokines and Cytokine Receptors*

[012] Cytokines are small soluble proteins produced by one cell that alter the behavior or other properties of another cell or itself. Thus, by definition, cytokines are immunomodulatory molecules. Many cytokines have multiple biological effects and

are critical to the regulation of the immune response. For a review on cytokines, refer to Chapter 11 of *Cellular and Molecular Immunology* by Abbas et al. (1991).

[013] Immune responses of the acquired immune system can be classified into two broad classes of immune responses: humoral (antibody-mediated) immune responses and cell-mediated immune responses (cell-mediated, i.e., cytotoxic T cell, immune response). Both types of responses require activation of CD4<sup>+</sup> T helper cells. Depending on several factors, of which one factor is the cytokine environment, T helper (Th) cells may differentiate into either Th1 cells that promote cell-mediated responses or Th2 cells that promote humoral responses. Th1 cells, which produce interferon (IFN)-gamma, interleukin (IL)-2 and tumor necrosis factor (TNF)-beta, evoke cell-mediated immunity and phagocyte-dependent inflammation. Th2 cells, which produce IL-4, IL-5, IL-6, IL-9, IL-10, and IL-13, evoke strong antibody responses (including those of the IgE class) and eosinophil accumulation, but inhibit several functions of phagocytic cells (phagocyte-independent inflammation). The presence of Th1 or Th2 T cells can have a dramatic effect on the outcome of infection. A Th1 response during the course of infection by the intracellular bacterium *mycobacterium leprae* (*M. leprae*) is protective, whereas a Th2 response is much less so. Patients that make Th2 response to *M. leprae* develop full-blown lepromatous leprosy which is eventually fatal. The (mis)regulation of Th1 and Th2 responses have been implicated in the pathogenesis of several diseases, including several organ-specific autoimmune disorders such as Crohn's disease, sarcoidosis, acute kidney allograft rejection, some unexplained recurrent abortions. For a review on Th1 and Th2 subsets, see Romagnani, *Ann. Allergy Asthma Immunol.* 85:9-18 (2000).

[014] From the preceding example it is apparent that cytokines have play key roles on the class and effectiveness of the immune response. It is important to note that cytokines have effects on cell of both the innate and acquired immune systems and are produced by both immune and non-immune cells types.

[015] Other cytokines such as interferon-alpha (secreted by leukocytes) and interferon-beta (secreted by fibroblasts and many other cell types) are cytokines that function to target the immune system towards fighting viral infections. The binding of interferon-alpha and -beta to cells results in a cellular signalling cascade which ultimately results in the inhibition of viral replication in infected cells, the upregulation

of MHC class I expression on cells, and the activation of Natural Killer (NK) cells. Interferons are useful in the diagnosis, treatment and prevention of viral infections and cancers.

*Intracellular immunomodulators.*

[016] Immunomodulatory proteins are not only cytokines or cytokine receptors. They may also be located intracellularly. For, example they may be intracellular components of a signaling pathway, or even intracellular receptors for certain signaling molecules such as steroids. One example of intracellular immunomodulatory proteins are the immunophilins such as cyclophilin and FK binding protein (FKBP). These immunophilins are peptidyl-prolyl cis-trans isomerases, though their enzymatic ability may be distinct from their role as immunomodulators. When these molecules are bound by the drugs, Cyclosporin A and FK506, respectively, they in turn inhibit the action of activated calcineurin. Calcineurin is a calcium activated serine/threonine kinase which dephosphorylates the transcription factor Nuclear Factor of Activated T cells (NF-AT). Upon dephosphorylation, NF-AT enters the nucleus and induces the transcription of several genes including IL-2. In sum, the immunophilin:drug complexes are able to inhibit clonal expansion of T cells by inhibiting IL-2 synthesis. In addition, FKBP when bound to another drug, rapamycin, can also inhibit the signaling of IL-2 through the IL-2 receptor. FKBP:rapamycin complexes accomplish the inhibition of IL-2 signaling not by binding to calcineurin, but by binding to and inactivating the protein kinases associated with IL-2 signaling resulting in the same outcome, the inhibition of T cell clonal expansion.

[017] Defects in any one or more of the components of the immune system can lead to disease or susceptibility to infectious diseases. Two major classes of immune system disorders are autoimmune diseases, and immunodeficiencies. In autoimmunity, the effector mechanisms of the immune system (e.g., antigen specific antibodies and cellular cytotoxicity, e.g., of cytotoxic T cells, or natural killer cells) are misdirected at self rather than foreign antigens resulting in tissue destruction. Diseases classified as or associated with immunodeficiencies are diseases in which the immune system is unable to mount an effective immune response. A classic example of an immunodeficiency is X-linked agammaglobulinemia in which an intracellular

signalling molecule expressed in B lymphocytes (Bruton's tyrosine kinase) is defective. The loss of function of this kinase prevents B cell maturation, thus patients with X linked agammaglobulinemia do not have mature B cells and are unable to make antibody, and as a result are susceptible to infection.

[018] The discovery of new human immune/hematopoietic polynucleotides, the polypeptides encoded by them, and antibodies that immunospecifically bind these polypeptides, satisfies a need in the art by providing new compositions which are useful in the diagnosis, treatment, prevention and/or prognosis of disorders of the immune system, including, but not limited to, autoimmune disorders, (e.g., systemic lupus erythematosus, rheumatoid arthritis, idiopathic thrombocytopenic purpura and multiple sclerosis) and immunodeficiencies (e.g., X-linked agammaglobulinemia, severe combined immunodeficiency, Wiskott-Aldrich syndrome, and ataxia telangiectasia). Additionally, immune/hematopoietic molecules would be useful as agents to boost immune responsiveness to pathogens or to suppress immune reactions, for example as is necessary in conjunction with organ transplantation.

### *Summary of the Invention*

[019] The present invention relates to novel immune/hematopoietic related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "immune/hematopoietic antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such immune/hematopoietic polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the immune system, including, but not limited to, the presence of cancer and cancer metastases of cells of hematopoietic origin. More specifically, isolated immune/hematopoietic nucleic acid molecules are provided encoding novel immune/hematopoietic polypeptides. Novel immune/hematopoietic polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human immune/hematopoietic polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the immune system or hematopoietic cells or tissues, including cancers of cells of

hematopoietic origin, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the polypeptides of the invention.

### *Detailed Description*

#### Tables

[020] Table 1A summarizes some of the polynucleotides encompassed by the invention (including cDNA clones related to the sequences (Clone ID NO:Z), contig sequences (contig identifier (Contig ID:) and contig nucleotide sequence identifier (SEQ ID NO:X)) and further summarizes certain characteristics of these polynucleotides and the polypeptides encoded thereby. The first column provides a unique clone identifier, "Clone ID NO:Z", for a cDNA plasmid related to each immune/hematopoietic associated contig sequence disclosed in Table 1A. The second column provides a unique contig identifier, "Contig ID:" for each of the contig sequences disclosed in Table 1A. The third column provides the sequence identifier, "SEQ ID NO:X", for each of the contig polynucleotide sequences disclosed in Table 1A. The fourth column, "ORF (From-To)", provides the location (i.e., nucleotide position numbers) within the polynucleotide sequence of SEQ ID NO:X that delineate the preferred open reading frame (ORF) shown in the sequence listing and referenced in Table 1A as SEQ ID NO:Y (column 5). Column 6 lists residues comprising predicted epitopes contained in the polypeptides encoded by each of the preferred ORFs (SEQ ID NO:Y). Identification of potential immunogenic regions was performed according to the method of Jameson and Wolf (CABIOS, 4:181-186 (1988)); specifically, the Genetics Computer Group (GCG) implementation of this algorithm, embodied in the program PEPTIDESTRUCTURE (Wisconsin Package v10.0, Genetics Computer Group (GCG), Madison, Wisc.). This method returns a measure of the probability that a given residue is found on the surface of the protein. Regions where the antigenic index score is greater than 0.9 over at least 6 amino acids are indicated in Table 1A as "Predicted Epitopes." In particular embodiments, immune/hematopoietic associated polypeptides of the invention comprise, or

alternatively consist of, one, two, three, four, five or more of the predicted epitopes described in Table 1A. It will be appreciated that depending on the analytical criteria used to predict antigenic determinants, the exact address of the determinant may vary slightly. Column 7, "Tissue Distribution" shows the expression profile of tissue, cells, and/or cell line libraries which express the polynucleotides of the invention. The first number in column 7 (preceding the colon), represents the tissue/cell source identifier code corresponding to the code and description provided in Table 4. Expression of these polynucleotides was not observed in the other tissues and/or cell libraries tested. For those identifier codes in which the first two letters are not "AR", the second number in column 7 (following the colon) represents the number of times a sequence corresponding to the reference polynucleotide sequence (e.g., SEQ ID NO:X) was identified in the tissue/cell source. Those tissue/cell source identifier codes in which the first two letters are "AR" designate information generated using DNA array technology. Utilizing this technology, cDNAs were amplified by PCR and then transferred, in duplicate, onto the array. Gene expression was assayed through hybridization of first strand cDNA probes to the DNA array. cDNA probes were generated from total RNA extracted from a variety of different tissues and cell lines. Probe synthesis was performed in the presence of  $^{33}\text{P}$  dCTP, using oligo(dT) to prime reverse transcription. After hybridization, high stringency washing conditions were employed to remove non-specific hybrids from the array. The remaining signal, emanating from each gene target, was measured using a Phosphorimager. Gene expression was reported as Phosphor Stimulating Luminescence (PSL) which reflects the level of phosphor signal generated from the probe hybridized to each of the gene targets represented on the array. A local background signal subtraction was performed before the total signal generated from each array was used to normalize gene expression between the different hybridizations. The value presented after "[array code]:" represents the mean of the duplicate values, following background subtraction and probe normalization. One of skill in the art could routinely use this information to identify normal and/or diseased tissue(s) which show a predominant expression pattern of the corresponding polynucleotide of the invention or to identify polynucleotides which show predominant and/or specific tissue and/or cell expression. Column 8, "Cytologic Band," provides the chromosomal location of polynucleotides



corresponding to SEQ ID NO:X. Chromosomal location was determined by finding exact matches to EST and cDNA sequences contained in the NCBI (National Center for Biotechnology Information) UniGene database. Given a presumptive chromosomal location, disease locus association was determined by comparison with the Morbid Map, derived from Online Mendelian Inheritance in Man (Online Mendelian Inheritance in Man, OMIM™. McKusick-Nathans Institute for Genetic Medicine, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine (Bethesda, MD) 2000. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>). If the putative chromosomal location of the Query overlapped with the chromosomal location of a Morbid Map entry, an OMIM identification number is provided in Table 1A, column 9 labeled "OMIM Disease Reference(s)". A key to the OMIM reference identification numbers is provided in Table 5.

[021] Table 1B summarizes additional polynucleotides encompassed by the invention (including cDNA clones related to the sequences (Clone ID NO:Z), contig sequences (contig identifier (Contig ID:) contig nucleotide sequence identifiers (SEQ ID NO:X)), and genomic sequences (SEQ ID NO:B). The first column provides a unique clone identifier, "Clone ID NO:Z", for a cDNA clone related to each contig sequence. The second column provides the sequence identifier, "SEQ ID NO:X", for each contig sequence. The third column provides a unique contig identifier, "Contig ID:" for each contig sequence. The fourth column, provides a BAC identifier "BAC ID NO:A" for the BAC clone referenced in the corresponding row of the table. The fifth column provides the nucleotide sequence identifier, "SEQ ID NO:B" for a fragment of the BAC clone identified in column four of the corresponding row of the table. The sixth column, "Exon From-To", provides the location (i.e., nucleotide position numbers) within the polynucleotide sequence of SEQ ID NO:B which delineate certain polynucleotides of the invention that are also exemplary members of polynucleotide sequences that encode polypeptides of the invention (e.g., polypeptides containing amino acid sequences encoded by the polynucleotide sequences delineated in column six, and fragments and variants thereof).

[022] Table 2 summarizes homology and features of some of the polypeptides of the invention. The first column provides a unique clone identifier, "Clone ID NO:Z",

corresponding to a cDNA disclosed in Table 1A. The second column provides the unique contig identifier, "Contig ID:" corresponding to contigs in Table 1A and allowing for correlation with the information in Table 1A. The third column provides the sequence identifier, "SEQ ID NO:X", for the contig polynucleotide sequences. The fourth column provides the analysis method by which the homology/identity disclosed in the row was determined. Comparisons were made between polypeptides encoded by the polynucleotides of the invention and either a non-redundant protein database (herein referred to as "NR"), or a database of protein families (herein referred to as "PFAM") as further described below. The fifth column provides a description of PFAM/NR hits having significant matches to a polypeptide of the invention. Column six provides the accession number of the PFAM/NR hit disclosed in the fifth column. Column seven, "Score/Percent Identity", provides a quality score or the percent identity, of the hit disclosed in column five. Columns 8 and 9, "NT.From" and "NT.To" respectively, delineate the polynucleotides in "SEQ ID NO:X" that encode a polypeptide having a significant match to the PFAM/NR database as disclosed in the fifth column. In specific embodiments, polypeptides of the invention comprise, or alternatively consist of, an amino acid sequence encoded by the polynucleotides in SEQ ID NO:X as delineated in columns 8 and 9, or fragments or variants thereof.

[023] Table 3 provides polynucleotide sequences that may be disclaimed according to certain embodiments of the invention. The first column provides a unique clone identifier, "Clone ID NO:Z", for a cDNA clone related to immune/hematopoietic associated contig sequences disclosed in Table 1A. The second column provides the sequence identifier, "SEQ ID NO:X", for contig polynucleotide sequences disclosed in Table 1A. The third column provides the unique contig identifier, "Contig ID", for contigs disclosed in Table 1A. The fourth column provides a unique integer 'a' where 'a' is any integer between 1 and the final nucleotide minus 15 of SEQ ID NO:X, represented as "Range of a", and the fifth column provides a unique integer 'b' where 'b' is any integer between 15 and the final nucleotide of SEQ ID NO:X, represented as "Range of b", where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:X, and where b is greater than or equal to a + 14. For each of the polynucleotides shown as SEQ ID NO:X, the uniquely defined integers can be substituted into the general formula of a-b, and used to describe polynucleotides which

may be preferably excluded from the invention. In certain embodiments, preferably excluded from the polynucleotides of the invention (including polynucleotide fragments and variants as described herein and diagnostic and/or therapeutic uses based on these polynucleotides) are at least one, two, three, four, five, ten, or more of the polynucleotide sequence(s) having the accession number(s) disclosed in the sixth column of this Table (including for example, published sequence in connection with a particular BAC clone). In further embodiments, preferably excluded from the invention are the specific polynucleotide sequence(s) contained in the clones corresponding to at least one, two, three, four, five, ten, or more of the available material having the accession numbers identified in the sixth column of this Table (including for example, the actual sequence contained in an identified BAC clone).

[024] Table 4 provides a key to the tissue/cell source identifier code disclosed in Table 1A, column 7. Column 1 provides the key to the tissue/cell source identifier code disclosed in Table 1A, Column 7. Columns 2-5 provide a description of the tissue or cell source. Codes corresponding to diseased tissues are indicated in column 6 with the word "disease". The use of the word "disease" in column 6 is non-limiting. The tissue or cell source may be specific (e.g. a neoplasm), or may be disease-associated (e.g., a tissue sample from a normal portion of a diseased organ). Furthermore, tissues and/or cells lacking the "disease" designation may still be derived from sources directly or indirectly involved in a disease state or disorder, and therefore may have a further utility in that disease state or disorder. In numerous cases where the tissue/cell source is a library, column 7 identifies the vector used to generate the library.

[025] Table 5 provides a key to the OMIM™ reference identification numbers disclosed in Table 1A, column 9. OMIM reference identification numbers (Column 1) were derived from Online Mendelian Inheritance in Man (Online Mendelian Inheritance in Man, OMIM™. McKusick-Nathans Institute for Genetic Medicine, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine, (Bethesda, MD) 2000. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>). Column 2 provides diseases associated with the cytologic band disclosed in Table 1A, column 8, as determined from the Morbid Map database.

- [026] Table 6 summarizes ATCC Deposits, Deposit dates, and ATCC designation numbers of deposits made with the ATCC in connection with the present application.
- [027] Table 7 shows the cDNA libraries sequenced, tissue source description, vector information and ATCC designation numbers relating to these cDNA libraries.
- [028] Table 8 provides a physical characterization of clones encompassed by the invention. The first column provides the unique clone identifier, "Clone ID NO:Z", for certain cDNA clones of the invention, as described in Table 1A. The second column provides the size of the cDNA insert contained in the corresponding cDNA clone.

### **Definitions**

- [029] The following definitions are provided to facilitate understanding of certain terms used throughout this specification.
- [030] In the present invention, "isolated" refers to material removed from its original environment (e.g., the natural environment if it is naturally occurring), and thus is altered "by the hand of man" from its natural state. For example, an isolated polynucleotide could be part of a vector or a composition of matter, or could be contained within a cell, and still be "isolated" because that vector, composition of matter, or particular cell is not the original environment of the polynucleotide. The term "isolated" does not refer to genomic or cDNA libraries, whole cell total or mRNA preparations, genomic DNA preparations (including those separated by electrophoresis and transferred onto blots), sheared whole cell genomic DNA preparations or other compositions where the art demonstrates no distinguishing features of the polynucleotide sequences of the present invention.
- [031] As used herein, a "polynucleotide" refers to a molecule having a nucleic acid sequence encoding SEQ ID NO:Y or a fragment or variant thereof, a nucleic acid sequence contained in SEQ ID NO:X (as described in column 3 of Table 1A) or the complement thereof, a cDNA sequence contained in Clone ID NO:Z (as described in column 1 of Table 1A and contained within a library deposited with the ATCC); a nucleotide sequence encoding the polypeptide encoded by a nucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1B or a fragment or variant thereof; or a nucleotide coding sequence in SEQ ID NO:B as defined in column 6 of Table 1B or

the complement thereof. For example, the polynucleotide can contain the nucleotide sequence of the full length cDNA sequence, including the 5' and 3' untranslated sequences, the coding region, as well as fragments, epitopes, domains, and variants of the nucleic acid sequence. Moreover, as used herein, a "polypeptide" refers to a molecule having an amino acid sequence encoded by a polynucleotide of the invention as broadly defined (obviously excluding poly-Phenylalanine or poly-Lysine peptide sequences which result from translation of a polyA tail of a sequence corresponding to a cDNA).

[032] As used herein, a "immune/hematopoietic antigen" refers collectively to any polynucleotide disclosed herein (e.g., a nucleic acid sequence contained in SEQ ID NO:X or the complement thereof, or cDNA sequence contained in Clone ID NO:Z, or a nucleotide sequence encoding the polypeptide encoded by a nucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1B, or a nucleotide coding sequence in SEQ ID NO:B as defined in column 6 of Table 1B or the complement thereof and fragments or variants thereof as described herein) or any polypeptide disclosed herein (e.g., an amino acid sequence contained in SEQ ID NO:Y, an amino acid sequence encoded by SEQ ID NO:X, or the complement thereof, an amino acid sequence encoded by the cDNA sequence contained in Clone ID NO:Z, an amino acid sequence encoded by SEQ ID NO:B, or the complement thereof, and fragments or variants thereof as described herein). These immune/hematopoietic antigens have been determined to be predominantly expressed in hematopoietic tissues (e.g., bone marrow, fetal liver, and fetal spleen) or cells and tissues of the immune system (e.g., lymph nodes, spleen, B cells, T cells, monocytes, macrophages, dendritic cells, neutrophils, mast cells, basophils, and eosinophils) including normal or diseased tissues (as shown in Table 1A column 7 and Table 4).

[033] In the present invention, "SEQ ID NO:X" was often generated by overlapping sequences contained in multiple clones (contig analysis). A representative clone containing all or most of the sequence for SEQ ID NO:X is deposited at Human Genome Sciences, Inc. (HGS) in a catalogued and archived library. As shown, for example, in column 1 of Table 1A, each clone is identified by a cDNA Clone ID (identifier generally referred to herein as Clone ID NO:Z). Each Clone ID is unique to an individual clone and the Clone ID is all the information needed to retrieve a given

clone from the HGS library. Furthermore, certain clones disclosed in this application have been deposited with the ATCC on October 5, 2000, having the ATCC designation numbers PTA 2574 and PTA 2575; and on January 5, 2001, having the depositor reference numbers TS-1, TS-2, AC-1, and AC-2. In addition to the individual cDNA clone deposits, most of the cDNA libraries from which the clones were derived were deposited at the American Type Culture Collection (hereinafter "ATCC"). Table 7 provides a list of the deposited cDNA libraries. One can use the Clone ID NO:Z to determine the library source by reference to Tables 6 and 7. Table 7 lists the deposited cDNA libraries by name and links each library to an ATCC Deposit. Library names contain four characters, for example, "HTWE." The name of a cDNA clone (Clone ID NO:Z) isolated from that library begins with the same four characters, for example "HTWEP07". As mentioned below, Table 1A correlates the Clone ID NO:Z names with SEQ ID NO:X. Thus, starting with an SEQ ID NO:X, one can use Tables 1A, 6 and 7 to determine the corresponding Clone ID NO:Z, which library it came from and which ATCC deposit the library is contained in. Furthermore, it is possible to retrieve a given cDNA clone from the source library by techniques known in the art and described elsewhere herein. The ATCC is located at 10801 University Boulevard, Manassas, Virginia 20110-2209, USA. The ATCC deposits were made pursuant to the terms of the Budapest Treaty on the international recognition of the deposit of microorganisms for the purposes of patent procedure.

[034] In specific embodiments, the polynucleotides of the invention are at least 15, at least 30, at least 50, at least 100, at least 125, at least 500, or at least 1000 continuous nucleotides but are less than or equal to 300 kb, 200 kb, 100 kb, 50 kb, 15 kb, 10 kb, 7.5 kb, 5 kb, 2.5 kb, 2.0 kb, or 1 kb, in length. In a further embodiment, polynucleotides of the invention comprise a portion of the coding sequences, as disclosed herein, but do not comprise all or a portion of any intron. In another embodiment, the polynucleotides comprising coding sequences do not contain coding sequences of a genomic flanking gene (i.e., 5' or 3' to the gene of interest in the genome). In other embodiments, the polynucleotides of the invention do not contain the coding sequence of more than 1000, 500, 250, 100, 50, 25, 20, 15, 10, 5, 4, 3, 2, or 1 genomic flanking gene(s).

[035] A "polynucleotide" of the present invention also includes those polynucleotides capable of hybridizing, under stringent hybridization conditions, to sequences contained in SEQ ID NO:X, or the complement thereof (e.g., the complement of any one, two, three, four, or more of the polynucleotide fragments described herein), the polynucleotide sequence delineated in columns 8 and 9 of Table 2 or the complement thereof, and/or cDNA sequences contained in Clone ID NO:Z (e.g., the complement of any one, two, three, four, or more of the polynucleotide fragments, or the cDNA clone within the pool of cDNA clones deposited with the ATCC, described herein) and/or the polynucleotide sequence delineated in column 6 of Table 1B or the complement thereof. "Stringent hybridization conditions" refers to an overnight incubation at 42 degree C in a solution comprising 50% formamide, 5x SSC (750 mM NaCl, 75 mM trisodium citrate), 50 mM sodium phosphate (pH 7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 µg/ml denatured, sheared salmon sperm DNA, followed by washing the filters in 0.1x SSC at about 65 degree C.

[036] Also contemplated are nucleic acid molecules that hybridize to the polynucleotides of the present invention at lower stringency hybridization conditions. Changes in the stringency of hybridization and signal detection are primarily accomplished through the manipulation of formamide concentration (lower percentages of formamide result in lowered stringency), salt conditions, or temperature. For example, lower stringency conditions include an overnight incubation at 37 degree C in a solution comprising 6X SSPE (20X SSPE = 3M NaCl; 0.2M NaH<sub>2</sub>PO<sub>4</sub>; 0.02M EDTA, pH 7.4), 0.5% SDS, 30% formamide, 100 µg/ml salmon sperm blocking DNA; followed by washes at 50 degree C with 1XSSPE, 0.1% SDS. In addition, to achieve even lower stringency, washes performed following stringent hybridization can be done at higher salt concentrations (e.g. 5X SSC).

[037] Note that variations in the above conditions may be accomplished through the inclusion and/or substitution of alternate blocking reagents used to suppress background in hybridization experiments. Typical blocking reagents include Denhardt's reagent, BLOTTO, heparin, denatured salmon sperm DNA, and commercially available proprietary formulations. The inclusion of specific blocking reagents may require modification of the hybridization conditions described above, due to problems with compatibility.

[038] Of course, a polynucleotide which hybridizes only to polyA<sup>+</sup> sequences (such as any 3' terminal polyA<sup>+</sup> tract of a cDNA shown in the sequence listing), or to a complementary stretch of T (or U) residues, would not be included in the definition of "polynucleotide," since such a polynucleotide would hybridize to any nucleic acid molecule containing a poly (A) stretch or the complement thereof (e.g., practically any double-stranded cDNA clone generated using oligo dT as a primer).

[039] The polynucleotide of the present invention can be composed of any polyribonucleotide or polydeoxribonucleotide, which may be unmodified RNA or DNA or modified RNA or DNA. For example, polynucleotides can be composed of single- and double-stranded DNA, DNA that is a mixture of single- and double-stranded regions, single- and double-stranded RNA, and RNA that is mixture of single- and double-stranded regions, hybrid molecules comprising DNA and RNA that may be single-stranded or, more typically, double-stranded or a mixture of single- and double-stranded regions. In addition, the polynucleotide can be composed of triple-stranded regions comprising RNA or DNA or both RNA and DNA. A polynucleotide may also contain one or more modified bases or DNA or RNA backbones modified for stability or for other reasons. "Modified" bases include, for example, tritylated bases and unusual bases such as inosine. A variety of modifications can be made to DNA and RNA; thus, "polynucleotide" embraces chemically, enzymatically, or metabolically modified forms.

[040] The polypeptide of the present invention can be composed of amino acids joined to each other by peptide bonds or modified peptide bonds, i.e., peptide isosteres, and may contain amino acids other than the 20 gene-encoded amino acids. The polypeptides may be modified by either natural processes, such as posttranslational processing, or by chemical modification techniques which are well known in the art. Such modifications are well described in basic texts and in more detailed monographs, as well as in a voluminous research literature. Modifications can occur anywhere in a polypeptide, including the peptide backbone, the amino acid side-chains and the amino or carboxyl termini. It will be appreciated that the same type of modification may be present in the same or varying degrees at several sites in a given polypeptide. Also, a given polypeptide may contain many types of modifications. Polypeptides may be branched, for example, as a result of



ubiquitination, and they may be cyclic, with or without branching. Cyclic, branched, and branched cyclic polypeptides may result from posttranslation natural processes or may be made by synthetic methods. Modifications include acetylation, acylation, ADP-ribosylation, amidation, covalent attachment of flavin, covalent attachment of a heme moiety, covalent attachment of a nucleotide or nucleotide derivative, covalent attachment of a lipid or lipid derivative, covalent attachment of phosphatidylinositol, cross-linking, cyclization, disulfide bond formation, demethylation, formation of covalent cross-links, formation of cysteine, formation of pyroglutamate, formylation, gamma-carboxylation, glycosylation, GPI anchor formation, hydroxylation, iodination, methylation, myristoylation, oxidation, pegylation, proteolytic processing, phosphorylation, prenylation, racemization, selenoylation, sulfation, transfer-RNA mediated addition of amino acids to proteins such as arginylation, and ubiquitination. (See, for instance, PROTEINS - STRUCTURE AND MOLECULAR PROPERTIES, 2nd Ed., T. E. Creighton, W. H. Freeman and Company, New York (1993); POSTTRANSLATIONAL COVALENT MODIFICATION OF PROTEINS, B. C. Johnson, Ed., Academic Press, New York, pgs. 1-12 (1983); Seifter et al., Meth. Enzymol. 182:626-646 (1990); Rattan et al., Ann. N.Y. Acad. Sci. 663:48-62 (1992).)

[041] "SEQ ID NO:X" refers to a polynucleotide sequence described, for example, in Tables 1A or 2, while "SEQ ID NO:Y" refers to a polypeptide sequence described in column 5 of Table 1A. SEQ ID NO:X is identified by an integer specified in column 3 of Table 1A. The polypeptide sequence SEQ ID NO:Y is a translated open reading frame (ORF) encoded by polynucleotide SEQ ID NO:X. "Clone ID NO:Z" refers to a cDNA clone described in column 1 of Table 1A.

[042] "A polypeptide having biological activity" refers to a polypeptide exhibiting activity similar to, but not necessarily identical to, an activity of a polypeptide of the present invention, including mature forms, as measured in a particular biological assay, with or without dose dependency. In the case where dose dependency does exist, it need not be identical to that of the polypeptide, but rather substantially similar to the dose-dependence in a given activity as compared to the polypeptide of the present invention (i.e., the candidate polypeptide will exhibit greater activity or not more than about 25-fold less and, preferably, not more than about tenfold less activity,

and most preferably, not more than about three-fold less activity relative to the polypeptide of the present invention).

[043] Table 1A summarizes some of the immune/hematopoietic associated polynucleotides encompassed by the invention (including contig sequences (SEQ ID NO:X) and clones (Clone ID NO:Z) and further summarizes certain characteristics of these polynucleotides and the polypeptides encoded thereby.

### **Polynucleotides and Polypeptides**

#### **TABLE 1A**

Clone ID NO: Z	Contig ID:	SEQ ID NO: X	ORF (From-To)	AA SEQ ID NO: Y	Predicted Epitopes	Tissue Distribution Library code: count (see Table IV for Library Codes)	Cytologic Band	OMIM Disease Reference(s):
HAMHB21	961376	11	17 - 2389	9763		AR089: 3, AR061: 1 H0271: 18, H0556: 9, H0265: 8, H0581: 8, L0761: 4, H0543: 4, H0422: 4, H0656: 3, H0457: 3, L0766: 3, T0002: 2, L0748: 2, H0220: 1, H0650: 1, S0282: 1, H0610: 1, H0069: 1, H0635: 1, H0179: 1, H0416: 1, H0031: 1, H0090: 1, T0041: 1, H0560: 1, H0529: 1, L0667: 1, L0649: 1, L0803: 1, L0659: 1, L0666: 1, S0052: 1, S0216: 1, H0702: 1, H0518: 1, H0521: 1, L0750: 1, H0445: 1, H0423: 1, H0677: 1 and H0506: 1.		
HASAX16	573692	12	138 - 302	9764	Tyr-20 to Ile-33.	H0004: 2		
HASAY74	526312	13	79 - 318	9765		H0004: 1, H0090: 1 and H0543: 1.		
HASAY89	958768	14	125 - 280	9766	Glu-28 to Lys-34.	H0004: 1, L0749: 1 and H0445: 1.		
HASAY94	521835	15	2 - 103	9767	Thr-10 to Asn-22.	H0004: 2		
HBCAL36	931477	16	3 - 440	9768	Glu-26 to Ser-31, Glu-36 to Gln-55, Glu-70 to Asn-82, Ser-93 to Pro-98, Ser-115 to Ser-121.	H0370: 1, H0581: 1 and H0264: 1.		
HBCAL39	964871	17	333 - 491	9769	Arg-1 to Ser-6.	H0255: 2, H0370: 2 and S0053: 1.		
HBCAM74	864366	18	1 - 348	9770	Pro-29 to Ser-37.	H0341: 1, H0370: 1 and		

HBCAR79	573989	19	186 - 359	9771	Pro-12 to Trp-31.	L0520: 1.		
HBCAS69	669802	20	3 - 245	9772		H0370: 2		
HBCAT17	503573	21	48 - 266	9773	Trp-1 to Ser-11.	H0370: 1 and H0063: 1. S0114: 1, H0370: 1, H0075: 1 and L0758: 1.		
HBCAT63	573993	22	1 - 96	9774		H0370: 2	3q26	165215, 222900, 600049
HBCBM52	932514	23	464 - 574	9775		H0370: 1, T0042: 1 and H0423: 1.		
HBCBX12	861018	24	42 - 233	9776	Gly-1 to Gly-6, Pro-23 to Pro-29.	H0271: 2 and H0370: 1.		
HBCBZ05	922800	25	539 - 727	9777		H0370: 2		
HBDAC79	935414	26	1 - 366	9778	Met-4 to Lys-12, Phe-41 to Phe-50.	AR089: 2, AR061: 1 H0556: 2, L0766: 2, S0418: 1, S0442: 1, H0393: 1, H0261: 1, S0222: 1, H0545: 1, H0050: 1, S6028: 1, H0551: 1, H0494: 1, S0144: 1, S0002: 1, H0529: 1, H0521: 1, L0439: 1, L0759: 1, S0308: 1, L0366: 1 and H0506: 1.		
HBDAD04	614849	27	87 - 293	9779		H0063: 1 and S0308: 1.		
HBDADF51	725481	28	275 - 484	9780		H0255: 1, L0756: 1 and S0308: 1.	19q13.4	134790, 191044, 600040, 600138
HBDADF61	864338	29	124 - 306	9781	Leu-49 to Ser-54.	H0486: 1, H0522: 1 and S0308: 1.		
HBJAB59	557972	30	223 - 369	9782	Arg-11 to Ser-28.	H0318: 1 and H0264: 1.		
HBJAC23	529753	31	3 - 176	9783		H0265: 1 and H0318: 1.		
HBJAG72	722723	32	2 - 217	9784	Ser-1 to Pro-7.	H0318: 2		
HBJAI91	677397	33	9 - 308	9785	Lys-38 to Ser-43.	H0318: 2		
HBJAJ75	953840	34	120 - 275	9786		H0318: 4		
HBJAJ85	675904	35	3 - 83	9787		H0305: 1 and H0318: 1.		
HBJAV57	527998	36	2 - 271	9788		H0318: 1 and S0053: 1.		
HBJAY76	527908	37	55 - 300	9789	Lys-3 to Trp-9.	H0318: 2		
HBJAY91	828026	38	17 - 205	9790		H0318: 2		

HBIBM14	781398	39	79 - 189	9791			H0254: 2 and H0318: 1.		
HBIBR94	527903	40	177 - 344	9792			H0318: 2		
HBIBU55	527112	41	137 - 271	9793		Gly-1 to Pro-6.	H0318: 2		
HBICD43	714390	42	20 - 145	9794			H0318: 2		
HBICD88	697628	43	158 - 334	9795		Ile-39 to Gln-48.	H0318: 1 and H0445: 1.		
HBICJ68	823468	44	99 - 182	9796			H0318: 1 and H0445: 1.		
HBICO81	527711	45	1 - 132	9797		Ser-28 to Arg-44.	H0318: 2		
HBICR51	847946	46	39 - 185	9798		Pro-29 to Thr-36.	T0002: 1 and H0318: 1.		
HBICR90	527702	47	206 - 331	9799			S0114: 1 and H0318: 1.		
HBIDL73	531104	48	64 - 171	9800			H0318: 2		
HBIDN14	856216	49	89 - 316	9801		Gln-46 to Gln-54.	H0318: 1 and S0344: 1.		
HBIDO70	752830	50	2 - 148	9802			H0318: 2		
HBIDP32	573846	51	1 - 117	9803		Lys-1 to Phe-6.	H0318: 2		
HBIDP41	494836	52	1 - 153	9804			H0318: 2		
HBIDQ75	847935	53	3 - 209	9805			H0318: 2		
HBIDT05	932302	54	38 - 100	9806			H0318: 2		
HBIDT47	573728	55	18 - 98	9807			H0318: 2		
HBIDW23	919383	56	151 - 420	9808			H0318: 2		
HBIDW36	573847	57	165 - 377	9809		Gln-1 to Lys-15.	H0318: 2		
HBIDX18	795732	58	267 - 557	9810		Lys-19 to Gln-24, Lys-78 to Leu-83.	H0254: 1, H0318: 1 and L0599: 1.		
HBIDX51	716395	59	245 - 391	9811			H0318: 3		
HBIEA22	674872	60	35 - 208	9812		Leu-2 to Asn-15.	H0318: 1 and S0053: 1.		
HBIEA25	589249	61	221 - 466	9813		Asp-15 to Arg-20, Ser-39 to Tyr-44, Gln-54 to Gly-60.	H0318: 1, H0090: 1, L0766: 12 1, L0748: 1 and L0779: 1.		
HBIEA44	973376	62	292 - 459	9814			H0318: 3		
HBIEA65	934994	63	342 - 518	9815		Asp-5 to Trp-12, Arg-18 to Gln-28.	H0318: 2 and L0748: 1.		
HBIEA90	895961	64	271 - 516	9816			AR054: 10, AR051: 2, AR050: 1 H0306: 1, H0318: 1, L0766: 1 and L0776: 1.		
HBIED66	787251	65	10 - 174	9817			H0318: 1 and H0264: 1.		
HBIEE29	888625	66	98 - 244	9818			AR054: 21, AR051: 14,		

									AR050: 14 H0090: 2, H0318: 1 and S0426: 1.			
HBJEE30	531103	67	2 - 229	9819					H0318: 2 and L0766: 1.			
HBJEH70	971161	68	1 - 78	9820					H0255: 1 and H0318: 1.			
HBJEI42	669495	69	140 - 424	9821					H0318: 2			
HBJEJ21	671201	70	80 - 202	9822				Asp-26 to Pro-33.	H0318: 2			
HBJEJ29	693490	71	117 - 425	9823				Arg-2 to Pro-15, Pro-37 to Trp-52.	H0318: 2.			
HBJEJ83	847920	72	115 - 264	9824					H0318: 1, L0766: 1 and H0445: 1.			
HBJEO29	693491	73	2 - 190	9825				Lys-43 to Ser-49.	H0318: 2			
HBJEP15	847843	74	54 - 257	9826				-	AR051: 21, AR054: 19, AR050: 13 H0318: 2			
HBJEP73	764573	75	105 - 227	9827				Pro-14 to Phe-19.	H0318: 2			
HBJER19	953804	76	101 - 262	9828				Arg-5 to Glu-10, Arg-16 to Gln-24.	H0318: 2			
HBJES44	715846	77	3 - 380	9829					L0747: 2, S0114: 1, H0318: 1, L0770: 1, L0658: 1 and L0790: 1.			
HBJET76	527553	78	419 - 571	9830					H0305: 2, H0402: 1, H0318: 1, L0761: 1 and H0445: 1.			
HBJET94	794343	79	33 - 167	9831					S0140: 2 and H0318: 1.			
HBJEW15	507534	80	554 - 102	9832				Ser-1 to Ser-7, Pro-16 to Cys-21.	H0255: 1 and H0318: 1.			
HBJEZ09	573781	81	101 - 238	9833					S0116: 1 and H0318: 1.			
HBJEZ16	421567	82	157 - 330	9834				Pro-1 to Asn-8.	H0318: 2			
HBJEZ39	690479	83	3 - 155	9835					H0318: 1 and H0445: 1.			
HBJFC51	725818	84	22 - 216	9836					S0116: 1 and H0318: 1.			
HBJFJ53	573806	85	177 - 425	9837					H0318: 2 and L0748: 2.			
HBJFK55	625315	86	137 - 301	9838				Arg-41 to Arg-48.	H0318: 2			
HBJFL49	573970	87	256 - 378	9839					H0318: 2			
HBJFP58	738298	88	1 - 87	9840				Lys-1 to Ser-9, Ser-20 to Pro-26.	H0318: 2			

HBJFV07	953795	89	1 - 135	9841	Ala-12 to Lys-19.	H0318: 2	
HBJFV59	573747	90	167 - 280	9842	Pro-28 to Phe-38.	H0318: 2	
HBJFW10	878778	91	113 - 418	9843	Ala-59 to Val-65, Val-73 to Met-78.	H0318: 2	
HBJFW19	573765	92	143 - 352	9844		H0318: 2	
HBJFW20	573755	93	194 - 328	9845		H0318: 2	
HBJFW50	571351	94	3 - 200	9846		H0318: 2	
HBJFW55	526682	95	2 - 199	9847	Ala-1 to Phe-12.	H0318: 2	
HBJFW68	573766	96	103 - 186	9848	Gly-2 to Glu-7.	H0318: 2	
HBJFW78	571347	97	95 - 340	9849	Asn-4 to Cys-10.	H0318: 2	
HBJFX57	573760	98	2 - 106	9850		H0318: 2	
HBJFX81	529843	99	55 - 240	9851	Asp-41 to Gly-47.	H0318: 1 and H0264: 1.	
HBJFY40	574095	100	276 - 464	9852		H0318: 1 and H0271: 1.	
HBJFZ21	671191	101	1 - 150	9853	Asn-4 to Leu-10, Thr-14 to Ser-23.	H0318: 2	
HBJFZ40	526679	102	1 - 420	9854	Ala-86 to Ala-95.	H0318: 2	
HBJFZ56	507530	103	56 - 256	9855		H0318: 2	
HBJFZ82	799685	104	147 - 338	9856	Arg-16 to Pro-23.	H0318: 3	
HBJGR59	739095	105	10 - 198	9857	Ser-1 to Glu-7.	H0318: 1 and H0444: 1.	
HBJGT72	957668	106	15 - 341	9858	Gly-1 to Gln-7, Cys-16 to Ser-26, Pro-55 to Gln-60, Ala-62 to Ser-71, Ser-82 to Arg-88.	H0457: 2 and H0318: 1. 22q11	104170, 104170, 104170, 115470, 142360, 188400, 188400, 217095, 600850, 601607
HBJGT92	919507	107	275 - 490	9859	Lys-7 to Ser-18, Pro-32 to Glu-51.	AR089: 1, AR061: 1 H0318: 2, L0517: 2 and L0748: 1.	
HBJGU70	864063	108	199 - 375	9860	Pro-26 to Lys-31.	H0318: 1, H0436: 1 and S0308: 1.	
HBJGU78	920821	109	130 - 552	9861	Ser-26 to Lys-42, Glu-62 to Ser-68.	S0116: 1, H0318: 1 and L0769: 1.	
HBJGV17	662725	110	305 - 451	9862	Tyr-6 to Gln-12.	H0255: 1 and H0318: 1.	
HBJGV22	613781	111	3 - 128	9863	Lys-37 to Met-42.	H0318: 2	152760, 180100, 185430, 602629
HBJGV32	699075	112	100 - 243	9864	Asn-40 to Lys-48.	H0444: 2 and H0318: 1.	

HBJHG04	836184	113	81 - 317	9865	Glu-1 to Ser-7, Gln-55 to Arg-60.	H0318: 2	
HBJHG76	970826	114	265 - 405	9866	Lys-1 to Cys-10.	H0318: 1 and H0436: 1.	
HBJHI28	686278	115	2 - 118	9867	Lys-1 to Phe-16.	S0114: 1 and H0318: 1.	
HBJHJ44	621723	116	55 - 318	9868	Thr-30 to Asp-36, Ala-43 to His-49, Ile-79 to Thr-88.	L0745: 2, H0318: 1 and S0002: 1.	
HBJHM50	724183	117	220 - 348	9869		H0318: 2	
HBJHM57	973257	118	131 - 364	9870		H0318: 2	
HBJHM76	715512	119	25 - 204	9871	Ile-53 to Gly-58.	S0114: 1 and H0318: 1.	
HBJHN52	726570	120	118 - 288	9872		H0318: 2	
HBJHO11	964943	121	283 - 534	9873	Met-41 to Gly-46, Ile-50 to Leu-56, Val-60 to Thr-68.	L0794: 3, S0114: 1, H0318: 1, L0769: 1, L0639: 1 and L0768: 1.	
HBJHO60	975186	122	95 - 373	9874	Lys-17 to Gly-23.	H0318: 2	
HBJHR56	686717	123	359 - 586	9875	Asn-28 to Trp-37.	S0114: 1 and H0318: 1.	
HBJHT32	488736	124	203 - 334	9876		H0318: 2	
HBJHV93	881606	125	162 - 353	9877		H0318: 1, H0521: 1 and L0600: 1.	
HBJHX08	958970	126	423 - 590	9878		H0318: 2	
HBJHZ03	923733	127	305 - 505	9879		S0114: 1, H0306: 1, H0402: 1 and H0318: 1.	
HBJHZ08	958969	128	213 - 386	9880	Lys-14 to Thr-19, Trp-27 to Gly-33.	S0114: 1 and H0318: 1.	
HBJIA19	920881	129	430 - 639	9881		H0318: 2 and L0777: 1.	
HBJIA92	494812	130	189 - 326	9882		H0318: 1 and H0271: 1.	
HBJID21	670642	131	328 - 429	9883	Lys-24 to Gly-30.	H0318: 1, L0519: 1, H0436: 1 and L0752: 1.	
HBJID81	697594	132	6 - 212	9884	Gln-29 to Asn-35, Lys-56 to Pro-65.	H0305: 2, H0589: 1, H0318: 1 and L0766: 1.	
HBJIL11	966701	133	248 - 427	9885		S0114: 1 and H0318: 1.	
HBJIL31	847865	134	259 - 423	9886		H0318: 1 and H0421: 1.	
HBJIL53	971136	135	258 - 473	9887		H0402: 1 and H0318: 1.	
HBJIL75	698405	136	151 - 384	9888		H0318: 1 and H0272: 1.	
HBJIL88	721859	137	223 - 360	9889		S0428: 2, H0318: 1 and	



HBJO70	725097	138	286 - 420	9890	Glu-9 to Asn-19.	S0052: 1.		
HBJO79	774812	139	361 - 498	9891		H0318: 2		
HBJIR58	735365	140	156 - 344	9892		L0766: 2, H0318: 1, L0805: 1, L0776: 1 and H0543: 1.		
HBJIY20	669519	141	10 - 162	9893	Ala-1 to Ala-8.	H0318: 1 and S0002: 1.		
HBJIY86	725084	142	424 - 651	9894		AR061: 6, AR089: 2		
HBJJB02	919379	143	16 - 201	9895	Arg-1 to Arg-17.	H0318: 2		
HBJJB04	878974	144	1 - 264	9896		H0318: 2		
HBJJB11	965016	145	30 - 266	9897	Ser-5 to Lys-11, Arg-19 to Gly-25, Ser-28 to Glu-33.	H0318: 2, L0766: 2 and L0599: 2.		
HBJJB15	659920	146	36 - 413	9898	Glu-12 to Gly-17, Pro-28 to Glu-40, Gln-47 to Arg-52.	H0318: 2 and L0740: 1.		
HBJJB26	681342	147	34 - 147	9899	Gln-1 to Gln-12, Ser-25 to Pro-30.	H0318: 2		
HBJJB40	710873	148	2 - 157	9900	Ser-26 to Gly-35.	H0318: 2 and L0758: 2.		
HBJJB61	741615	149	1 - 309	9901	Cys-20 to Ser-27, Trp-34 to Gly-40.	H0318: 2		
HBJJB62	743096	150	114 - 284	9902	Ser-1 to Trp-7, Ile-18 to Ala-28, Pro-50 to Pro-57.	H0318: 2		
HBJJB74	765406	151	11 - 232	9903	Gly-1 to Trp-10, Arg-40 to Ala-50.	H0318: 2		
HBJJB78	489438	152	218 - 403	9904	Ser-14 to Thr-31, Val-35 to Gln-40, Leu-46 to Tyr-54.	H0318: 2		
HBJJD31	691780	153	81 - 362	9905	Pro-45 to Asp-50.	H0318: 2		
HBJJD90	712982	154	204 - 410	9906	Gln-6 to Gln-12, Tyr-14 to Lys-19, Gln-45 to Phe-50.	H0318: 2		
HBJJD48	721473	155	127 - 306	9907		H0318: 2		
HBJIN13	915977	156	2 - 202	9908	Ser-32 to Glu-37,	H0318: 2		

HBJJQ29	666221	157				Lys-51 to Asn-57. Gln-39 to Ser-47, Thr-55 to Phe-65.	H0318: 2		
HBJJS46	718894	158					H0318: 2 and H0580: 1.		
HBJJU62	664298	159				Ser-35 to Thr-40, Ser-48 to Asp-54.	H0318: 1 and S0002: 1.		
HBJJU81	671611	160				Asp-47 to Phe-66, Ser-105 to Asn-110.	H0318: 1, L0764: 1 and S0053: 1.		
HBJJX04	949592	161					L0761: 2, H0318: 1, H0581: 1 and L0800: 1.		
HBJJX11	847854	162					H0318: 2		
HBJJX44	657242	163					H0556: 1, S0116: 1, H0318: 1, H0591: 1, L0740: 1 and L0605: 1.		
HBJKA75	682250	164					S0116: 1 and H0318: 1.		
HBJKC52	974123	165				Pro-8 to Leu-15, Phe-26 to Gln-32.	H0318: 3		
HBJKC56	735812	166				Leu-3 to Lys-10, Thr-15 to Leu-28.	H0318: 2, L0741: 1 and L0748: 1.		
HBJKC86	974121	167					H0318: 3		
HBJKD68	676330	168				Ser-8 to Cys-13.	H0254: 1 and H0318: 1.		
HBJKE63	744847	169				Pro-1 to Lys-9, Asn-24 to Glu-32.	H0318: 1 and S0052: 1.		
HBJKF06	935033	170					H0318: 2 and L0779: 1.		
HBJKF86	714449	171					H0318: 1 and H0445: 1.		
HBJKI26	489160	172					H0318: 2 and L0749: 1.		
HBJLB78	588085	173					H0318: 1 and H0542: 1.		
HBJLC51	784830	174					H0486: 2, L0598: 2, L0751: 2, L0758: 2, H0318: 1, L0794: 1, L0766: 1, L0804: 1, L0775: 1, L0663: 1 and H0445: 1.		
HBJLD57	683265	175					H0318: 1, L0766: 1 and H0445: 1.		
HBJLD73	765356	176				Lys-26 to Arg-34, Pro-45 to Asn-50.	H0318: 2		

HBJLE82	735748	177	284 - 397	9929			H0318: 2		
HBJLF58	864013	178	52 - 192	9930	Ser-39 to Lys-47.		H0318: 2		
HBJLL07	952791	179	58 - 144	9931			H0318: 2		
HBJLL13	656721	180	215 - 304	9932			H0318: 2		
HBJLL18	665874	181	59 - 244	9933	Lys-1 to Thr-18, Tyr-26 to Ser-32.		H0318: 2		
HBJLL28	847840	182	44 - 223	9934	Lys-2 to Ile-8.		H0318: 2		
HBJLL57	734522	183	3 - 116	9935			H0318: 2 and H0551: 1.		
HBJLL68	752810	184	39 - 137	9936			H0318: 2		
HBJLP14	657747	185	164 - 295	9937			H0318: 1 and H0264: 1.		
HBJLR56	843811	186	189 - 719	9938	Gly-1 to Arg-14.		L0362: 3, H0318: 2, L0601: 2 and : 1.	19q13.3-q13.4	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 191044, 258501, 600040, 600138, 602225, 602225
HBJLR82	779004	187	1 - 366	9939	Ala-1 to Gln-6.		H0318: 2	2p23.3	176830, 176830, 182601, 229800, 602134
HBJLV29	823400	188	1 - 387	9940	Gly-19 to Ser-28, Ser-33 to Thr-38.		H0318: 2		
HBJMA30	661665	189	2 - 274	9941	Ser-10 to Lys-17, Arg-44 to Val-72.		H0318: 2, L0766: 1 and L0748: 1.		
HBJMA51	725095	190	101 - 184	9942			H0318: 1 and S0053: 1.		
HBJMC53	726491	191	167 - 310	9943			H0318: 2		
HBJMD71	760155	192	328 - 459	9944			H0318: 1 and H0581: 1.		
HBJMD74	975088	193	53 - 208	9945	Asp-1 to Pro-7.		S0116: 1 and H0318: 1.		
HBJME92	792110	194	32 - 190	9946	Arg-1 to Ser-8, Glu-22 to Asp-30, Ala-38 to Arg-43.		H0318: 2		
HBJMF23	675692	195	29 - 202	9947	Gln-15 to Gly-20.		H0318: 2		
HBJMF30	691179	196	2 - 166	9948			H0318: 1 and H0521: 1.		
HBJMF47	720050	197	1 - 189	9949	Arg-17 to Ala-22.		H0318: 2		
HBJMI76	720047	198	150 - 362	9950	Arg-22 to Lys-29, Leu-46 to Pro-53.		H0318: 2		

HBJMK34	935952	199	109 - 456	9951			H0318: 1, T0042: 1 and L0758: 1.		
HBJMK94	794129	200	80 - 196	9952			L0745: 4, H0486: 1, H0318: 1, L0764: 1 and L0788: 1.		
HBJML28	614911	201	271 - 420	9953			H0318: 2		
HBJML69	864004	202	246 - 419	9954		Thr-18 to Trp-23.	S0114: 1, H0370: 1 and H0318: 1.		
HBJMM72	760833	203	3 - 422	9955		Glu-15 to Ala-24.	L0804: 5, H0656: 3, H0318: 2, L0766: 2, S0114: 1, H0657: 1, H0625: 1, L0761: 1, L0803: 1, L0774: 1, L0655: 1 and H0542: 1.		
HBJMN75	699060	204	202 - 366	9956		Ala-24 to Arg-30.	H0318: 3		
HBJMQ86	576429	205	64 - 351	9957			H0255: 1, H0318: 1 and S0053: 1.		
HBJMR15	964484	206	2 - 136	9958		Lys-37 to Val-43.	H0318: 1 and H0436: 1.		
HBJMR60	740142	207	29 - 337	9959			H0318: 1 and H0444: 1.		
HBJMT52	726480	208	2 - 163	9960			H0318: 1 and S0053: 1.		
HBJMV72	952862	209	282 - 413	9961			H0318: 1 and H0444: 1.		
HBJMW20	669030	210	158 - 319	9962			H0318: 1 and H0445: 1.		
HBJMX04	614930	211	128 - 352	9963		Pro-6 to Glu-19.	H0318: 2		
HBJMX21	933143	212	158 - 367	9964		Glu-26 to Pro-36.	H0318: 1 and H0264: 1.		
HBJMX29	690404	213	217 - 360	9965			H0318: 2		
HBJMX34	703843	214	122 - 289	9966		Ala-30 to Arg-37.	H0318: 2		
HBJNC11	966608	215	165 - 509	9967			H0318: 2		
HBJNC89	786707	216	28 - 189	9968		Ala-1 to Pro-6, Pro-9 to Asp-21.	H0318: 2 and S0216: 1.		
HBJND59	576434	217	152 - 358	9969		Lys-36 to Cys-51, Glu-61 to Val-66.	S0053: 2 and H0318: 1.		
HBMB18	578887	218	12 - 131	9970			H0421: 2		
HBMB25	573103	219	1 - 171	9971		Ser-1 to His-11, Ser-43 to Trp-50.	S0116: 1 and H0421: 1.		
HBMB35	921417	220	1 - 180	9972			S0116: 1 and H0421: 1.		
HBMB39	506594	221	90 - 389	9973		Cys-20 to Asp-25.	L0748: 3, L0749: 2, S0116: 1 and H0421: 1.		

HBMBE72	760737	222	37 - 426	9974	Trp-3 to Pro-10.	H0341: 1, H0421: 1, L0776: 1, L0789: 1, L0731: 1 and H0542: 1.		
HBMBE84	578869	223	63 - 338	9975	Arg-6 to Asn-13, Leu-58 to Leu-64.	H0421: 2		
HBMBH36	971172	224	96 - 260	9976		H0421: 5		
HBMBH55	732250	225	52 - 219	9977		H0421: 2		
HBMBH91	753141	226	2 - 211	9978	Ala-45 to Asp-50.	H0421: 3		
HBMBO6	935819	227	121 - 267	9979	Gly-19 to Asp-24.	H0421: 1 and H0423: 1.		
HBMBO32	775670	228	82 - 375	9980	Arg-1 to Asn-7.	H0318: 1 and H0421: 1.		
HBMBO20	496513	229	154 - 372	9981	Pro-7 to Phe-14, Glu-46 to Val-53.	H0421: 2		
HBMBO33	702457	230	134 - 421	9982	Ser-14 to Asn-19.	S0116: 1, H0421: 1 and L0748: 1.		
HBMBO83	689705	231	93 - 218	9983	Leu-8 to Glu-25.	H0421: 2, L0777: 1 and L0731: 1.		
HBMBS11	967111	232	154 - 315	9984	Arg-35 to Lys-41, Leu-47 to Ser-54.	H0421: 2		
HBMBS85	863938	233	112 - 312	9985		S0116: 1 and H0421: 1.		
HBMBS24	677240	234	1 - 192	9986	Met-25 to Gln-30, Leu-34 to His-40, Thr-46 to Lys-64.	H0421: 2 and S0116: 1.		
HBMBS38	531494	235	142 - 246	9987	Ser-7 to Ser-13.	S0116: 1, H0318: 1, H0421: 1 and S0002: 1.		
HBMBS69	698362	236	1 - 105	9988	Glu-9 to Cys-17.	S0116: 1 and H0421: 1.		
HBMBS27	574803	237	259 - 420	9989		S0116: 2 and H0421: 1.		
HBMBS71	880580	238	2 - 565	9990	Pro-13 to Pro-18, Ala-25 to Val-31, Thr-71 to Ala-76, Gly-101 to Pro-117, Pro-130 to Arg-135.	L0752: 2, L0758: 2, H0421: 1, S0428: 1 and L0779: 1.		
HBMCA44	716647	239	1 - 516	9991	Ala-15 to Glu-21, Ala-37 to Gly-45.	H0421: 1, H0090: 1, L0750: 1, L0777: 1 and L0758: 1.		
HBMCA58	736084	240	103 - 282	9992	Gln-25 to Ala-34.	H0421: 2		
HBMCA94	793174	241	316 - 432	9993		H0421: 2		
HBMCD26	847826	242	1 - 288	9994	Gly-85 to Arg-92.	S0116: 1, H0421: 1, S0426: 1		

HBMC49	723005	243							1 and L0655: 1.			
HBMC22	674659	244			133 - 297	9995			H0421: 2			
HBMCH75	932037	245							H0486: 1, H0421: 1, L0805: 1 and L0750: 1.			
HBMCH88	711318	246			190 - 378	9997		Ser-9 to Lys-14.	H0421: 1 and H0576: 1.			
HBMCK57	495736	247			162 - 251	9998		Leu-1 to Asn-10.	H0421: 2, S0134: 1 and H0423: 1.			
HBMCQ14	847828	9547			425 - 237	9999		Gly-1 to Arg-8, Asp-17 to Cys-23, Phe-25 to Lys-33.	H0556: 1, H0421: 1 and H0090: 1.			
HBMC34	703438	249			136 - 321	19299		Glu-33 to Ala-40, Ser-44 to Arg-53.	H0421: 2			
HBMC57	465070	250			25 - 204	10000		Gly-17 to Gly-25.	S0116: 1, H0421: 1, L0803: 1, L0790: 1 and L0754: 1.			
HBMC77	751643	251			386 - 517	10001		Thr-38 to Ser-45, Pro-63 to Glu-70.	S0116: 1, H0421: 1 and L0748: 1.			
HBMC92	529580	252			1 - 315	10002		Glu-8 to Arg-15, His-28 to Tyr-34.	H0421: 2			
HBMC211	967099	253			1 - 165	10003		Leu-15 to Asp-20, Arg-28 to Arg-35.	H0421: 1 and H0179: 1.			
HBMC27	683436	254			96 - 221	10004			H0421: 2			
HBMC32	855694	255			42 - 248	10005			S0116: 1 and H0421: 1.			
HBMDA51	691116	256			99 - 344	10006			H0421: 2			
HBMDC03	924183	257			62 - 190	10007			H0421: 2 and H0436: 2.			
HBMDC16	888206	258			270 - 434	10008			H0421: 1 and H0445: 1.			
HBMDC88	750274	259			275 - 367	10009			AR054: 1, AR050: 1			
HBMD36	861576	260			1 - 360	10010		Thr-2 to Tyr-11, Glu-64 to Ala-72.	H0421: 2			
HBMD59	739316	261			2 - 148	10011			H0421: 2			
HBMDE19	657382	262			107 - 292	10012			S0116: 1 and H0421: 1.			
HBMD55	952830	263			2 - 88	10013			S0116: 1, H0421: 1 and L0731: 1.			
					77 - 241	10014		Pro-41 to Asn-49.	H0421: 2, H0402: 1, L0749: 1 and H0444: 1.			
					8 - 358	10015			H0421: 1 and H0576: 1.			

HBMDH79	805554	264	207 - 446	10016	Arg-1 to His-12.	H0486: 1 and H0421: 1.	
HBMDJ11	967046	265	150 - 338	10017	His-23 to Lys-30.	H0421: 2	
HBMDJ36	721673	266	116 - 202	10018	Phe-6 to Asn-13, Asp-20 to Tyr-29.	H0421: 2	
HBMDK12	970684	267	106 - 360	10019	Phe-49 to Leu-55, Pro-63 to Asn-73.	H0421: 2	
HBMDK13	657221	268	228 - 464	10020	Cys-3 to Pro-16.	H0556: 2, H0421: 1, S0426: 1 and L0748: 1.	
HBMDS17	796050	269	64 - 267	10021		S0114: 1 and H0421: 1.	
HBMDS64	746572	270	176 - 406	10022	Ala-3 to Trp-9.	H0402: 1 and H0421: 1.	
HBMSB19	847800	271	126 - 266	10023		S0116: 2	
HBMSK92	531156	272	1 - 126	10024		S0116: 2	
HBMSO15	847795	273	1 - 141	10025		H0589: 2 and S0116: 1.	
HBMSO39	531158	274	3 - 218	10026	Lys-21 to Ala-29.	S0116: 2	
HBMTF79	544889	275	2 - 133	10027		S0116: 1 and H0264: 1.	
HBMTG05	932497	276	8 - 160	10028		S0116: 2	
HBMTM75	574515	277	2 - 310	10029	Pro-13 to Trp-18.	S0116: 2	
HBMTF84	703844	278	77 - 220	10030	Leu-1 to Glu-6, Glu-38 to Ala-48.	H0457: 2, S0116: 1 and H0576: 1.	
HBMTU03	924979	279	69 - 188	10031	Gly-1 to Pro-15, Lys-23 to Asp-34.	S0116: 2	
HBMTW58	806670	280	399 - 593	10032		H0556: 1 and S0116: 1.	
HBMTX29	689834	281	1 - 135	10033	Asp-1 to Asn-10.	S0116: 2	
HBMTX84	537385	282	95 - 337	10034	Trp-56 to Cys-62.	S0116: 2	
HBMTY82	523728	283	94 - 330	10035	Thr-35 to Ala-41.	H0264: 2 and S0116: 1.	
HBMTA62	557828	284	135 - 344	10036	Ser-36 to Leu-41.	S0114: 1 and S0116: 1.	
HBMTD12	574796	285	152 - 319	10037		S0116: 2	
HBMTU60	740606	286	1 - 126	10038	Val-14 to Gly-33.	S0116: 1 and S0308: 1.	
HBMTG57	735024	287	62 - 283	10039		S0116: 1 and H0271: 1.	
HBMTU62	752244	288	9 - 341	10040	Lys-1 to Ser-9.	S0116: 2	
HBMTJ84	531159	289	124 - 237	10041		S0116: 2	
HBMTK59	712591	290	2 - 121	10042	Lys-32 to Arg-37.	S0114: 1 and S0116: 1.	
HBMTN30	693337	291	83 - 217	10043		S0116: 1 and H0521: 1.	
HBMTU10	953933	292	2 - 127	10044		S0116: 2	
HBMTU12	417210	293	1 - 192	10045		S0116: 2	

HBMUO90	928078	294	2 - 265	10046	Asn-3 to Gln-9.	S0116: 1 and S0002: 1.		
HBMUP35	531101	295	80 - 214	10047	Asn-18 to His-24.	S0116: 2		
HBMUT83	793052	296	299 - 111	10048	Phe-20 to Ser-29.	L0766: 2, L0747: 2, L0779: 2, L0777: 2, L0755: 2, H0583: 1, S0116: 1, L0800: 1, L0644: 1, L0626: 1, L0375: 1, L0776: 1, L0792: 1, L0663: 1, L0748: 1, L0758: 1, L0593: 1 and H0423: 1.		
HBMUV03	924916	297	63 - 386	10049	Ser-30 to Leu-38.	S0116: 1, H0457: 1 and H0444: 1.		
HBMUY32	959968	298	1 - 195	10050		S0116: 2		
HBMUZ96	574522	299	76 - 216	10051		S0116: 2		
HBMVA83	529815	300	3 - 287	10052		S0116: 1 and H0264: 1.		
HBMVE14	545170	301	340 - 501	10053		S0116: 1, H0421: 1 and L0362: 1.		
HBMVI79	781686	302	143 - 3	10054	His-3 to Thr-9.	S0116: 1 and S0212: 1.		
HBMVI94	574511	303	55 - 183	10055		S0116: 2		
HBMVO02	920759	304	82 - 261	10056	Gln-52 to Tyr-60.	S0116: 1 and H0486: 1.		
HBMWA31	529678	305	57 - 215	10057	Ala-6 to Gln-11.	S0116: 1, H0264: 1, L0766: 1, L0803: 1, L0790: 1, L0749: 1 and L0731: 1.		
HBMWA57	526863	306	91 - 189	10058	Gln-1 to Gly-10.	S0116: 1 and H0271: 1.		
HBMWL35	706033	307	61 - 207	10059		S0218: 1 and S0116: 1.		
HBMWJ01	959223	308	267 - 395	10060		S0116: 1, L0794: 1, L0766: 1 and H0543: 1.		
HBMWL30	936058	309	3 - 218	10061		S0116: 2		
HBMWL91	529837	310	110 - 214	10062	Gln-21 to Gly-26.	S0116: 1 and H0264: 1.		
HBMWQ85	765109	311	226 - 411	10063	Leu-2 to Gly-8.	S0116: 2		
HBMWV93	574801	312	296 - 451	10064	Ser-6 to Asn-23.	S0116: 1 and H0264: 1.		
HBMWX74	573336	313	152 - 322	10065		S0116: 2		
HBMWZ14	573335	314	2 - 172	10066		S0116: 2		
HBMWZ16	712832	315	144 - 293	10067	Ala-14 to Asp-46.	S0116: 1, H0255: 1 and L0744: 1.		
HBMWZ94	573348	316	1 - 153	10068		S0116: 2		



HBMXE31	573323	317	1 - 312	10069			S0116: 2		
HBMXF47	573324	318	80 - 21	10070	Lys-1 to Ser-6.		S0116: 2		
HBMXG08	959766	319	221 - 418	10071			S0116: 1 and H0521: 1.		
HBMXH68	571361	320	1 - 186	10072	Glu-38 to Arg-44.		S0116: 1 and H0421: 1.		
HBMXL10	968054	321	166 - 399	10073	Gln-20 to Asn-25.		S0116: 2		
HBMXM65	925570	322	1 - 156	10074	Arg-1 to Arg-7, Gly-15 to Gly-20.		S0116: 3 and H0341: 1.		
HBMXN39	705578	323	171 - 362	10075			S0116: 1 and H0271: 1.		
HBMXN69	731274	324	159 - 314	10076	Pro-8 to Asn-16.		S0116: 2		
HBMXO08	959768	325	3 - 185	10077	Ala-17 to Cys-27, Ala-29 to Glu-38.		S0116: 2		
HBMXP90	574802	326	172 - 321	10078			S0116: 2, H0187: 1, L0748: 1, L0439: 1, L0747: 1 and L0757: 1.		
HBMXR44	693123	327	84 - 230	10079			H0556: 1 and S0116: 1.		
HBMXS38	706039	328	132 - 347	10080	Lys-32 to Asp-40.		S0116: 1, L0766: 1, L0664: 1 and H0445: 1.		
HBMXU37	787155	329	32 - 148	10081	Leu-33 to Phe-39.		S0116: 1 and T0041: 1.		
HBMXW13	657241	330	2 - 265	10082	Phe-20 to Val-26.		S0114: 1 and S0116: 1.		
HBMXW73	764440	331	188 - 337	10083	Ala-1 to Gly-10, Phe-34 to Glu-42.		L0599: 2, S0116: 1, L0769: 1 and H0521: 1.		
HBTAE07	953607	332	24 - 263	10084	Leu-7 to Gly-12, Leu-23 to Cys-28, Thr-34 to Ala-58.		S0180: 1, S0052: 1 and L0599: 1.		
HBUAG42	676856	333	3 - 362	10085			H0486: 1 and S0182: 1.		
HBVAA17	924209	334	3 - 152	10086	Ser-34 to Cys-44.		S3016: 2 and S0053: 1.		
HBVAB40	463488	335	92 - 319	10087	Ser-23 to Trp-31.		S3016: 1 and H0422: 1.		
HCFAA38	576731	336	84 - 422	10088	Ser-1 to Gly-10, Arg-15 to Gly-20, Pro-71 to Lys-79.		H0422: 2		
HCFAC84	869259	337	391 - 570	10089	Asn-53 to Thr-60.		H0556: 1 and H0422: 1.		
HCFAF63	689719	338	156 - 266	10090			H0445: 1 and H0422: 1.		
HCFAT85	728254	339	155 - 346	10091	Leu-6 to Glu-12, Ser-53 to Lys-64.		S0053: 1 and H0422: 1.		
HCFUA41	576064	340	141 - 302	10092	Gly-8 to Leu-13,		H0543: 1 and H0422: 1.		

HCAU74	576069	341	23 - 136	10093	Asp-32 to Lys-40.	H0422: 2		
HCAV46	924086	342	92 - 262	10094	Ile-27 to Lys-33, Thr-40 to Ser-45.	H0305: 2, H0402: 1, L0748: 1 and H0422: 1.		
HCAW03	924532	343	3 - 188	10095	Asp-1 to Arg-13.	L0738: 1, H0521: 1 and H0422: 1.		
HCFA27	784950	344	1 - 201	10096	Val-12 to Cys-22, Ala-42 to Ala-48.	S0216: 1, L0748: 1, L0749: 1 and H0422: 1.		
HCFA33	576058	345	36 - 146	10097		H0422: 2		
HCFA96	853961	346	2 - 148	10098	Arg-1 to Pro-13.	H0422: 2	11	
HCBB14	658542	347	59 - 190	10099	Ala-1 to Leu-8, Glu-12 to Arg-17.	H0656: 1, L0592: 1 and H0422: 1.		
HCFBD91	850449	348	3 - 155	10100		H0422: 2		
HCFBF07	953506	349	1 - 99	10101	Ile-2 to Lys-11.	H0422: 2		
HCFBG82	870890	350	161 - 526	10102	Gly-1 to Gly-6, Thr-20 to Trp-25, Met-30 to Phe-35, Cys-63 to Gly-68, Pro-73 to Gly-93.	H0585: 17, H0141: 7, L0804: 4, H0641: 2, L0769: 2, L0800: 2, L0803: 2, L0809: 2, L0731: 2, L0763: 1, L0761: 1, L0773: 1, L0789: 1, L0747: 1, L0777: 1 and H0422: 1.		
HCFBI39	576018	351	89 - 343	10103	Ser-25 to Thr-31.	H0422: 2		
HCFBI80	576669	352	2 - 241	10104	Pro-1 to Val-18.	H0063: 1 and H0422: 1.		
HCFBL08	959617	353	46 - 225	10105	Ser-16 to Tyr-39, Pro-42 to Gly-48.	H0220: 1 and H0422: 1.		
HCFBN62	576126	354	40 - 372	10106	Ser-23 to Lys-29.	H0255: 1, H0436: 1, H0576: 1 and H0422: 1.		
HCFBO39	835926	355	111 - 281	10107	Leu-12 to Met-23.	H0422: 2		
HCFBO76	577218	356	47 - 223	10108	Lys-42 to Asn-53.	S0053: 1 and H0422: 1.		
HCFBR92	576864	357	266 - 472	10109	Gln-29 to Thr-40, Glu-42 to Gly-51.	H0423: 1 and H0422: 1.		
HCFBS25	828076	358	3 - 170	10110		H0556: 1 and H0422: 1.	11	
HCFBS73	506244	359	207 - 401	10111	Ile-7 to Arg-17, Ser-33 to Thr-45.	H0422: 2		
HCFBU01	916703	360	265 - 495	10112	Thr-1 to Glu-10, Phe-19 to Lys-35.	S0114: 2, H0402: 1 and H0422: 1.		

HCFBU38	707620	361	183 - 287	10113	Gly-18 to Ser-29.	H0422: 2		
HCFBU84	573546	362	349 - 459	10114		H0341: 2 and H0422: 1.		
HCFBU85	576010	363	1 - 267	10115		H0422: 2		
HCFBW13	828042	364	253 - 447	10116		H0422: 2	7q21-q22	116860, 126650, 126650, 129900, 133170, 154276, 173360, 173360, 602136, 602136, 602136, 602447
HCFBY02	920340	365	218 - 385	10117	Val-1 to Lys-9.	S0426: 1, L0659: 1, L0731: 1 and H0422: 1.		
HCFA31	725700	366	44 - 388	10118		L0748: 1, H0543: 1 and H0422: 1.		
HCFB67	751764	367	61 - 297	10119		H0445: 1 and H0422: 1.		
HCFCC57	577375	368	2 - 268	10120		L0805: 3, H0264: 1, L0629: 1 and H0422: 1.		
HCFCC68	753089	369	1 - 171	10121	Tyr-20 to Lys-27.	H0576: 1 and H0422: 1.		
HCFCC94	670538	370	3 - 146	10122	Asp-1 to Gly-6, Leu-31 to Ala-38, Pro-40 to Arg-45.	H0589: 1 and H0422: 1.		
HCFCD44	883973	371	102 - 410	10123	Leu-15 to Val-20, Pro-22 to Lys-32.	H0305: 2 and H0422: 1.		
HCFCF47	894415	372	2 - 298	10124	Arg-1 to Glu-8.	AR089: 14, AR061: 7 H0341: 1 and H0422: 1.		
HCFCH47	720400	373	140 - 268	10125		S0134: 1 and H0422: 1.		
HCF CJ21	671028	374	72 - 191	10126	Leu-17 to Lys-40.	AR089: 0, AR061: 0 H0422: 2		
HCF CM12	970835	375	386 - 670	10127	Gln-6 to Ala-13, Ser-15 to Ser-20.	L0748: 1, L0439: 1, H0445: 1 and H0422: 1.		
HCF CN66	850422	376	116 - 256	10128		H0422: 2		
HCF CN81	576871	377	146 - 481	10129		H0341: 1, L0439: 1, L0590: 1 and H0422: 1.		
HCF CP14	577277	378	1 - 111	10130		S0114: 1 and H0422: 1.		
HCF CP31	764750	379	63 - 443	10131	Glu-30 to Lys-36, Gly-59 to Leu-65.	H0090: 2, H0486: 1, L0766: 1, L0743: 1, L0751: 1, L0777: 1 and H0422: 1.		

HCFCR76	862682	380	2 - 247	10132	Arg-1 to Thr-6.	S0114: 2 and H0422: 1.	
HCFCX73	575988	381	110 - 256	10133	Leu-22 to Asn-27.	H0422: 2	
HCFCDB13	576709	382	79 - 297	10134	Ser-49 to Thr-54.	S0052: 1 and H0422: 1.	
HCFCDD48	720938	383	90 - 236	10135	Cys-14 to Arg-22, Lys-25 to Cys-33.	H0444: 1 and H0422: 1.	
HCFCDE10	961270	384	156 - 332	10136		H0650: 1 and H0422: 1.	
HCFCDE19	671507	385	283 - 564	10137		H0271: 1, L0731: 1 and H0422: 1.	
HCFCDE79	575996	386	196 - 327	10138	Thr-15 to Asn-23, Ile-29 to Lys-39.	H0422: 2	
HCFLC28	968304	387	139 - 357	10139	Ile-1 to Ala-8, Ala-47 to Glu-52, Gln-64 to Asp-69.	H0264: 1 and H0423: 1.	
HCFLD28	850564	388	131 - 448	10140	Ile-2 to Lys-7, Pro-13 to Ser-24, Ser-37 to Gln-45, His-55 to Pro-64, Thr-74 to Glu-81.	H0423: 2, S0114: 1, L0790: 1 and H0436: 1.	
HCFLD78	773685	389	422 - 616	10141	Phe-10 to Ser-17, Gly-31 to Ser-42.	L0749: 3, L0743: 2, L0758: 2, H0318: 1, L0770: 1, L0806: 1, L0744: 1, L0748: 1, L0751: 1, L0747: 1, L0777: 1 and H0423: 1.	
HCFLB44	576679	390	63 - 260	10142	Gln-47 to Ala-53.	S0052: 1, H0444: 1 and H0423: 1.	
HCFLB95	945122	391	2 - 277	10143	Pro-1 to Ser-27.	S0344: 1 and H0423: 1.	15q26.1
HCFLF96	579039	392	2 - 130	10144	Ser-2 to Lys-16.	H0305: 1 and H0423: 1.	
HCFLG84	711243	393	140 - 400	10145	Gly-1 to Ser-10, Pro-18 to Phe-29.	H0255: 1 and H0423: 1.	
HCFLI49	722269	394	236 - 538	10146		H0250: 1, T0042: 1 and H0423: 1.	
HCFLJ40	576068	395	228 - 338	10147		H0423: 2	
HCFLP31	698139	396	85 - 222	10148		S0053: 1 and H0423: 1.	
HCFLR55	576043	397	58 - 255	10149		H0423: 2	
HCFLR83	576054	398	150 - 269	10150		H0423: 2 and H0436: 1.	
HCFLT42	576040	399	1 - 171	10151	Tyr-8 to Gln-14,	H0423: 2 and L0766: 1.	

HCFLU12	970849	400	154 - 474	10152	Ser-25 to Asp-31.	H0543: 1 and H0423: 1.	
HCFLW58	964870	401	301 - 444	10153	Thr-38 to Val-45.	L0002: 1, H0063: 1, L0594: 1 and H0423: 1.	
HCFMC42	670519	402	2 - 196	10154	Pro-3 to Ser-8.	H0589: 1, S0426: 1 and H0423: 1.	
HCFMD15	975075	403	214 - 441	10155	Ala-13 to Glu-19.	H0556: 2 and H0423: 1.	
HCFMD23	676003	404	2 - 208	10156	Gly-1 to Ser-15, Pro-36 to Glu-58.	S0344: 1 and H0423: 1.	
HCFME27	576815	405	76 - 318	10157	Pro-16 to Arg-33, Cys-68 to Gly-74.	S0053: 1 and H0423: 1.	
HCFMF47	973243	406	192 - 374	10158	Arg-54 to Lys-61.	H0436: 2 and H0423: 1.	
HCFMF64	773342	407	1 - 687	10159	His-4 to Asn-14, Ser-59 to Lys-75, Arg-77 to Leu-83, Cys-86 to Trp-93, Glu-103 to Leu-117, Glu-123 to Arg-136, Glu-143 to Glu-153.	H0583: 3, H0543: 2, H0650: 1q32 1, T0041: 1 and H0423: 1.	114208, 114208, 119300, 120620, 120620, 120920, 134370, 134370, 134370, 134580, 145260, 150310, 150310, 179820, 191045, 600105, 600759, 601494, 601975
HCFMG14	576063	408	3 - 368	10160	Asp-1 to Arg-9.	H0423: 2	
HCFMH12	970843	409	254 - 403	10161	Asn-16 to Gln-21.	H0423: 2	
HCFMJ70	576096	410	208 - 354	10162		L0532: 1, H0436: 1 and H0423: 1.	
HCFMK25	576081	411	75 - 167	10163	Asn-1 to Asn-8.	H0423: 2	
HCFMK27	576094	412	161 - 292	10164	Leu-31 to Leu-37.	H0423: 2	
HCFMK49	576098	413	3 - 422	10165		H0423: 2	
HCFMK62	576097	414	2 - 241	10166	Arg-1 to Leu-10, Phe-27 to Phe-32, Glu-39 to Ser-45.	H0423: 2	
HCFMK63	506251	415	1 - 216	10167		H0423: 2	
HCFML42	576667	416	311 - 415	10168		S0134: 1 and H0423: 1.	
HCFMM81	506250	417	85 - 222	10169		H0423: 2	
HCFMN07	953522	418	2 - 139	10170	Lys-37 to Val-43.	H0306: 1 and H0423: 1.	

HCFMO64	805822	419	267 - 575	10171			S0278: 1, L0439: 1 and H0423: 1.		
HCFMT62	954213	420	283 - 573	10172			H0254: 2, S0114: 1 and H0423: 1.		
HCFMY85	933017	421	94 - 312	10173		Thr-26 to Gly-33.	H0090: 1 and H0423: 1.		
HCFMZ17	664132	422	1 - 198	10174		Ala-6 to Asp-17, Arg-61 to Trp-66.	H0416: 1 and H0423: 1.	9q31.1	223900, 253800, 253800
HCFNA30	772262	423	1 - 141	10175		Gly-1 to Arg-16.	H0423: 2 and H0445: 1.		
HCFNB62	576446	424	58 - 255	10176		Pro-27 to Trp-34, Glu-55 to Ala-62.	H0423: 2		
HCFNK43	973548	425	119 - 514	10177		Lys-1 to Gln-6, Arg-59 to Phe-66.	H0423: 2		
HCFNO55	576008	426	150 - 362	10178			H0423: 2		
HCFNQ04	615351	427	681 - 896	10179		Glu-32 to Arg-37.	S0144: 1, L0605: 1 and H0423: 1.		
HCFOB11	967196	428	65 - 130	10180			H0423: 2, L0766: 1 and H0521: 1.		
HCFOE38	576005	429	102 - 263	10181			H0423: 2 and H0581: 1.		
HCFOF90	561625	430	207 - 356	10182			H0423: 2, H0069: 1 and L0662: 1.		
HCFOG82	576007	431	64 - 180	10183		Lys-10 to Thr-15, Tyr-18 to Thr-23.	H0423: 2		
HCFOH56	577114	432	116 - 262	10184		Tyr-9 to Met-15, Gln-17 to Ser-22, Pro-43 to Ala-49.	H0423: 2 and L0748: 1.		
HCFOI11	967195	433	28 - 216	10185		Lys-19 to Lys-26.	S0052: 1 and H0423: 1.		
HCFOL96	796104	434	24 - 203	10186		Pro-25 to Gly-33.	H0444: 1 and H0423: 1.		
HCFOO18	575965	435	221 - 394	10187			H0423: 2		
HCFOP42	460824	436	299 - 159	10188		Glu-1 to Gly-14, Arg-38 to Ala-43.	H0477: 1 and H0423: 1.		
	862556	9548	257 - 439	19300		Ser-8 to Ile-13.			
HCFOP46	927654	437	39 - 134	10189			H0423: 2		
HCUAA60	670941	438	4 - 66	10190			H0306: 1 and H0402: 1.		
HCUAD58	738408	439	1 - 180	10191			H0583: 1 and H0306: 1.		
HCUAE70	959686	440	2 - 181	10192			H0402: 2 and H0306: 1.		

HCUAG89	706427	441	236 - 394	10193	Pro-15 to Val-29.	H0306: 2		
HCUAG92	504395	442	1 - 129	10194	Glu-1 to Thr-7.	H0306: 1 and H0057: 1.		
HCUAH15	916651	443	1 - 168	10195		H0306: 1 and H0402: 1.	2ql1-q12	129490, 167415, 176947, 600334
HCUAH60	916621	444	1 - 153	10196	Glu-16 to Glu-21, Arg-31 to Leu-39.	H0306: 1 and H0402: 1.		
HCUAH70	574164	445	80 - 265	10197	Lys-6 to Gly-22.	H0306: 2		
HCUAI71	959492	446	169 - 312	10198		H0402: 2 and H0306: 1.		
HCUAK23	676289	447	57 - 185	10199	His-29 to Gly-34.	H0306: 1 and H0305: 1.		
HCUAK49	574256	448	155 - 292	10200	Thr-1 to Tyr-8, Thr-11 to Trp-16.	H0306: 2		
HCUAL07	953876	449	2 - 373	10201	Pro-12 to Arg-18, Gly-20 to Ala-35, Ala-44 to Ala-60, Gly-78 to Ser-84.	H0306: 1, H0402: 1, L0769: 1 and L0780: 1.		
HCUAM57	574375	450	143 - 274	10202		H0306: 2		
HCUAM95	727174	451	1 - 141	10203	Glu-37 to Asp-45.	S0114: 1 and H0306: 1.		
HCUAN44	574154	452	3 - 188	10204	Pro-6 to Trp-16.	H0306: 1 and S0053: 1.		
HCUAN49	577897	453	67 - 156	10205	Lys-7 to Val-12.	L0766: 3, H0556: 1, H0306: 1, H0264: 1, L0779: 1 and L0599: 1.		
HCUAN72	850140	454	3 - 143	10206	Val-20 to Tyr-26.	H0306: 1, H0087: 1 and S0216: 1.		
HCUAO03	924902	455	78 - 299	10207		H0306: 1, H0402: 1 and L0367: 1.		
HCUAO28	850062	456	189 - 347	10208	Leu-19 to Gly-28.	H0306: 1, H0402: 1 and L0599: 1.		
HCUAQ92	506688	457	184 - 291	10209	Pro-8 to Ser-14.	H0306: 2		
HCUAR07	953872	458	57 - 140	10210		H0306: 1 and H0402: 1.		
HCUAT07	953869	459	14 - 424	10211		H0306: 2 and L0599: 1.		
HCUAU02	920694	460	3 - 152	10212	Ser-14 to Trp-20.	H0306: 2		
HCUAU16	574193	461	28 - 135	10213		H0306: 2		
HCUAX57	934633	462	153 - 308	10214		H0306: 1, S0052: 1, S0216: 1, L0438: 1 and L0779: 1.		
HCUBB28	685493	463	81 - 239	10215		H0306: 1 and H0402: 1.		

HCUBB46	577238	464	142 - 282	10216	Lys-15 to Gly-23.	H0402: 2 and H0306: 1.		
HCUBE26	810522	465	1 - 111	10217		H0306: 2		
HCUBE27	574097	466	96 - 344	10218	Pro-42 to Ala-50, Pro-52 to Phe-59.	H0306: 2		
HCUBE55	574203	467	3 - 284	10219	Phe-17 to Arg-28, His-59 to Gln-78.	H0306: 2		
HCUBG79	781681	468	41 - 190	10220	Asn-5 to Asp-21, Ser-44 to Lys-50.	H0306: 2		
HCUBG83	537501	469	20 - 151	10221	Ile-21 to Gly-27.	H0265: 1 and H0306: 1.		
HCUBH45	575720	470	53 - 133	10222	Arg-14 to Lys-27.	H0306: 1 and H0402: 1.		
HCUBI13	862161	471	83 - 226	10223		H0306: 2, H0402: 1, S0053: 1 and L0748: 1.		
HCUBI14	574199	472	14 - 112	10224	Thr-15 to Thr-31.	H0306: 2		
HCUBI15	881192	473	77 - 343	10225	Val-29 to Leu-43.	H0306: 3		
HCUBI38	792415	474	206 - 502	10226	Gly-1 to Gly-17, Pro-20 to Ala-28, Pro-31 to Leu-44.	H0306: 2		
HCUBI43	685512	475	40 - 129	10227	Ala-5 to Cys-14.	H0306: 2		
HCUBI49	961748	476	27 - 95	10228		H0306: 2 and H0657: 1.		
HCUBI74	574235	477	44 - 256	10229	Pro-5 to Gln-20, Glu-30 to Arg-35, Arg-43 to Arg-52.	H0306: 2		
HCUBJ11	967484	478	3 - 272	10230	Arg-1 to Leu-8, Ile-12 to Pro-18, Glu-27 to Trp-39, Gly-66 to Ala-72.	H0306: 1 and H0402: 1.		
HCUBJ42	574265	479	89 - 250	10231	Glu-12 to Gln-20.	H0306: 2		
HCUBK01	917257	480	272 - 421	10232	His-3 to Ala-10, Leu-13 to Arg-18, Gln-20 to Gly-25.	H0306: 2		
HCUBK36	850132	481	107 - 475	10233		H0306: 1 and H0576: 1.		
HCUBK39	577234	482	262 - 504	10234	Pro-29 to Ser-34.	H0306: 1 and H0402: 1.		
HCUBK46	574120	483	143 - 298	10235	Arg-32 to Leu-38.	H0306: 2		
HCUBK49	574122	484	70 - 378	10236	Arg-17 to Asp-23, Cys-44 to His-50, Ile-72 to Glu-86.	H0306: 2		



HCUBL12	739021	485	2 - 211	10237	Leu-91 to Lys-96.	H0305: 2, H0306: 1 and H0589: 1.		
HCUBL65	574201	486	80 - 310	10238	Ala-1 to Ser-10, Leu-39 to Glu-54. His-6 to Thr-13, Pro-23 to Gly-36, Pro-38 to Ser-46.	H0306: 2		
HCUBM86	577291	487	1 - 180	10239	Leu-1 to Arg-8.	H0306: 1 and S0140: 1.		
HCUBN07	953879	488	26 - 118	10240		H0306: 2, H0305: 1 and L0783: 1.		
HCUBN21	577287	489	103 - 345	10241	Gly-10 to Arg-17.	H0306: 1 and H0402: 1.		
HCUBN38	971421	490	29 - 184	10242	Arg-1 to Cys-7, Val-44 to Lys-52.	H0306: 1 and H0402: 1.		
HCUBN66	664536	491	1 - 147	10243	Asp-29 to Ser-40.	H0306: 1 and S0140: 1.		
HCUBO08	959928	492	37 - 219	10244		H0306: 1 and H0402: 1.		
HCUBP69	526757	493	64 - 147	10245	Leu-12 to Pro-28.	H0306: 2		
HCUBP89	850016	494	52 - 318	10246	Thr-72 to Cys-78.	H0306: 1 and H0402: 1.		
HCUBQ76	575352	495	71 - 166	10247		H0306: 1 and H0305: 1.		
HCUBQ85	967074	496	1 - 219	10248	Ile-11 to Ala-18, Ser-41 to Arg-48.	H0306: 4, H0402: 2 and S0052: 1.		
HCUBS58	522378	497	308 - 180	10249	Phe-4 to Cys-9, Asn-32 to Ser-42.	H0306: 1, L0622: 1 and H0057: 1.		
HCUBS72	577286	498	50 - 199	10250	Asn-26 to Gly-38.	H0306: 1 and H0402: 1.		
HCUBT02	920682	499	131 - 283	10251		H0306: 2		
HCUBT94	574239	500	295 - 540	10252	Glu-18 to Phe-28, Pro-37 to Asn-42, Ser-49 to Cys-59.	H0402: 2, L0748: 2, H0306: 1, S0002: 1, L0749: 1 and L0755: 1.		
HCUBV04	615547	501	31 - 159	10253	Lys-31 to Asn-37.	H0306: 1 and H0402: 1.		
HCUBX57	506518	502	133 - 360	10254	Pro-32 to Leu-39.	H0306: 1 and H0402: 1.		
HCUBZ57	529702	503	144 - 335	10255		H0306: 2		
HCUBZ86	694720	504	2 - 160	10256		H0306: 1 and H0402: 1.		
HCUBZ88	574096	505	158 - 310	10257	Pro-33 to Asp-41, Pro-43 to Lys-51.	H0306: 2, H0402: 1, L0768: 1 and L0758: 1.		
HCUBZ96	506585	506	3 - 305	10258	Arg-1 to Asn-7, Pro-39 to Gly-52.	H0306: 1 and S0052: 1.		
HCUCB20	574189	507	171 - 374	10259	Thr-11 to Gly-18.	H0306: 2		

HCUC20	573901	508	127 - 288	10260	Glu-31 to Cys-39.	H0306: 2		
HCUC78	577129	509	29 - 304	10261		H0306: 1 and H0402: 1.		
HCUC96	796530	510	2 - 241	10262	Gly-10 to Ala-15, Val-46 to Val-51, Thr-70 to Lys-77.	H0306: 1 and H0402: 1.		
HCUCD26	574098	511	2 - 175	10263	Glu-10 to Thr-15, Ala-29 to Ile-47.	H0306: 2		
HCUCD82	780047	512	151 - 297	10264	Glu-9 to Arg-14.	H0306: 2		
HCUCG21	671210	513	93 - 386	10265	Pro-12 to Ser-19.	H0306: 1 and H0416: 1.		
HCUCI43	715488	514	19 - 171	10266	Gly-12 to Gly-28.	S0052: 2 and H0306: 1.	1p33-p34	120260, 130500, 133200, 138140, 168360, 171760, 171760, 176100, 176100, 178300, 230000, 246450, 255800
HCUCJ90	967501	515	17 - 79	10267		H0306: 2		
HCUCT08	959910	516	2 - 286	10268		H0306: 1 and S0216: 1.		
HCUCT48	720905	517	128 - 259	10269	Glu-16 to Cys-24.	H0306: 2		
HCUCV13	574121	518	3 - 143	10270	Gln-1 to Trp-9.	H0306: 2		
HCUCV20	694398	519	264 - 67	10271		H0402: 2 and H0306: 1.		
HCUDA38	862089	520	96 - 356	10272		H0402: 2		
HCUDB13	578712	521	70 - 177	10273	Leu-1 to Cys-7, Leu-19 to Thr-28.	H0402: 2 and L0771: 1.		
HCUDC45	576566	522	128 - 361	10274	Pro-14 to Gly-22.	H0402: 2		
HCUDC79	576577	523	21 - 155	10275	Ser-38 to Leu-43.	H0402: 2		
HCUDD19	959706	524	149 - 583	10276	Gln-1 to Arg-9.	H0402: 2		
HCUDD43	850103	525	2 - 199	10277		H0402: 2		
HCUDD57	734883	526	77 - 385	10278	Arg-10 to Arg-20, Gly-26 to Trp-32, Ser-51 to Gly-56, Pro-68 to Ser-77.	H0402: 2 and L0748: 1.		
HCUDE23	953868	527	16 - 138	10279	Glu-7 to Asp-17.	H0402: 3, H0306: 1, L0717: 1 and L0754: 1.		
HCUDE38	850076	528	3 - 266	10280	His-1 to Trp-8, Pro-43 to Ala-48,	H0402: 2		

HCUDE47	861150	529	389 - 802	10281	Leu-71 to Phe-76. Phe-13 to Ala-30, Thr-40 to Lys-45, Ser-57 to Pro-73, Lys-121 to Cys-138.	L0742: 7, L0439: 4, L0777: 2, H0341: 1, H0402: 1, H0439: 1, L0641: 1, L0803: 1, L0789: 1, S0216: 1 and L0741: 1.		
HCUDF26	676949	530	121 - 282	10282	Gly-23 to Val-29, Gln-32 to Asn-39.	H0402: 1 and H0318: 1.		
HCUDF33	577224	531	176 - 307	10283	Ile-31 to Gly-41.	L0748: 2, L0749: 2, H0306: 1 and H0402: 1.		
HCUDF90	958449	532	2 - 214	10284	Ser-13 to Ile-18.	H0402: 1, H0305: 1 and H0589: 1.		
HCUDH64	717894	533	1 - 405	10285	Lys-1 to Arg-11, Ala-34 to Arg-66, Gly-72 to Gly-79.	H0402: 2		
HCUDH84	713524	534	30 - 269	10286	Ala-8 to Gly-13, Gly-32 to Gly-38.	H0402: 1 and H0444: 1.		
HCUDJ91	861025	535	77 - 316	10287	Glu-5 to Ile-15, Ala-24 to Val-30.	H0402: 2 and H0179: 1.		
HCUDL94	915821	536	2 - 367	10288		H0457: 2, H0402: 1, L0766: 1 and L0659: 1.		
HCUDM23	462283	537	59 - 298	10289	Val-70 to Leu-75.	H0402: 1 and S0052: 1.		
HCUDM66	506522	538	209 - 379	10290		H0306: 1 and H0402: 1.		
HCUDN09	850101	539	466 - 353	10291		H0402: 2, H0139: 1, H0486: 1 and L0789: 1.		
HCUDN14	862119	540	181 - 414	10292		H0402: 2		
HCUDP19	578721	541	167 - 358	10293	Met-9 to Lys-34.	H0402: 2		
HCUDP23	783051	542	141 - 458	10294	Lys-27 to Arg-32.	H0402: 2		
HCUDP27	725155	543	101 - 331	10295		H0306: 1 and H0402: 1.		
HCUDP82	578720	544	1 - 351	10296		H0402: 2		
HCUDQ61	839959	545	124 - 330	10297	Glu-25 to Lys-41.	H0402: 2		
HCUDS61	578705	546	2 - 262	10298	Lys-81 to Arg-87.	H0402: 2 and L0177: 1.		
HCUDT62	747131	547	66 - 302	10299		H0402: 2		
HCUDT65	915742	548	1 - 1857	10300		AR089: 1, AR061: 0 H0402: 1, L0017: 1, H0635: 1 and L0492: 1.		

HCUDW37	859268	549	497 - 297	10301	Thr-1 to Lys-11.	H0402: 1 and S0002: 1.	
HCUDW74	576240	550	244 - 116	10302	Lys-1 to Trp-6, Gln-23 to Cys-32, Pro-35 to Pro-43.	H0402: 2	
HCUDX05	951165	551	1 - 51	10303		H0402: 1 and H0305: 1.	
HCUDX14	571370	552	83 - 319	10304		S0114: 1 and H0402: 1.	
HCUDZ25	678365	553	98 - 307	10305	Arg-6 to Arg-12, Ala-42 to Lys-70.	H0402: 2	
HCUEA58	579029	554	96 - 317	10306	Glu-1 to Gly-6, Pro-26 to Cys-39.	H0306: 1, H0402: 1 and H0416: 1.	
HCUEA63	745183	555	103 - 234	10307	Arg-14 to Glu-26, Leu-36 to Glu-42.	H0402: 2	
HCUEA72	713040	556	1 - 255	10308	Gly-1 to Gly-6, Val-41 to Pro-46.	H0402: 2 and L0648: 1.	
HCUEB62	579058	557	3 - 287	10309	Thr-81 to Trp-91.	H0306: 1 and H0402: 1.	
HCUEC06	935769	558	107 - 3	10310		H0402: 2	
HCUEC78	850066	559	19 - 195	10311	Pro-10 to Asp-21, Cys-45 to Thr-51.	H0402: 2	
HCUED04	615410	560	67 - 330	10312	Cys-7 to Arg-18, Lys-34 to Ser-43, Pro-48 to Ile-55.	H0402: 2	
HCUED66	576573	561	37 - 324	10313	Ser-11 to Lys-17, Arg-19 to Thr-29.	H0402: 2	
HCUEE04	653118	562	1 - 303	10314		H0402: 2	
HCUEE29	578709	563	36 - 206	10315		H0402: 2	
HCUEE41	578715	564	3 - 221	10316	Phe-1 to Trp-10.	H0402: 2	
HCUEE63	745184	565	3 - 113	10317	His-1 to Arg-12, Gly-25 to Thr-37.	H0402: 2	
HCUEE66	578702	566	47 - 211	10318		H0402: 2	
HCUEE83	578703	567	1 - 171	10319	Gly-1 to Lys-11.	H0402: 2	
HCUEF90	578714	568	2 - 148	10320	His-7 to Pro-25.	H0402: 2	
HCUEG58	784414	569	23 - 127	10321	Pro-7 to Asn-25.	H0402: 2	
HCUEG90	578745	570	20 - 115	10322		H0402: 3	
HCUEJ55	959552	571	19 - 111	10323		H0402: 2	
HCUEJ69	757657	572	122 - 400	10324		H0402: 1 and H0271: 1.	

HCUEK37	964869	573	135 - 344	10325	Ser-9 to Trp-15, Gln-22 to Tyr-35, Lys-41 to Gly-51.	H0402: 3		
HCUEL28	706456	574	101 - 232	10326		H0306: 1 and H0402: 1.		
HCUEL91	576568	575	2 - 118	10327	Ala-1 to Arg-29.	H0402: 2 and L0667: 1.		
HCUEM23	576379	576	138 - 386	10328	Glu-1 to Tyr-8.	H0402: 2		
HCUEM35	861545	577	86 - 319	10329	Pro-48 to Ala-69.	H0402: 2		
HCUEM62	576575	578	1 - 195	10330	Phe-5 to Ala-10, Gly-58 to Ser-65.	H0402: 2		
HCUEM34	706452	579	20 - 247	10331	Pro-10 to Arg-15.	H0402: 2		
HCUEM58	738225	580	221 - 436	10332	Arg-19 to Ile-30.	H0402: 1 and S0002: 1.		
HCUEO17	932118	581	99 - 242	10333		H0402: 4		
HCUEO30	769203	582	2 - 262	10334		H0402: 2		
HCUEO31	576551	583	55 - 171	10335		H0402: 2		
HCUEO41	576524	584	3 - 461	10336	His-1 to Ser-7, Pro-29 to Gln-34, Lys-64 to Pro-76, Glu-83 to Asn-99, Glu-101 to Arg-109.	H0402: 2		
HCUEO62	578713	585	271 - 399	10337	Gly-18 to Arg-28.	H0402: 2		
HCUEO79	850090	586	3 - 167	10338	Pro-30 to Arg-35.	H0306: 1, H0402: 1, L0623: 1 and S0052: 1.		
HCUEP01	913675	587	215 - 406	10339	Met-47 to Gly-58.	S0052: 2, H0341: 1, H0402: 1 and S0428: 1.		
HCUEQ37	881486	588	81 - 362	10340	Gln-13 to Arg-34.	H0402: 3, H0306: 1 and H0486: 1.		
HCUEQ56	751410	589	3 - 137	10341	His-1 to Gly-7, Gly-21 to Gly-29.	H0402: 1, L0776: 1, S0428: 1 and H0445: 1.		
HCUES29	579033	590	107 - 229	10342		H0402: 5, H0486: 2 and H0306: 1.		
HCUES34	850096	591	57 - 230	10343	Thr-43 to Lys-58.	H0402: 3		
HCUES93	576498	592	54 - 356	10344	Gly-22 to Leu-27.	H0402: 2		
HCUET13	657258	593	3 - 173	10345	Asp-37 to Leu-42, Pro-44 to Pro-56.	L0749: 3, H0402: 2, L0761: 2, L0803: 1 and L0790: 1.		
HCUET27	506339	594	3 - 158	10346		H0306: 1 and H0402: 1.		
HCUEU10	964857	595	1 - 105	10347		H0306: 1 and H0402: 1.		

HCUEU20	970780	596	58 - 255	10348	Glu-25 to Gly-36, Asp-59 to Ser-64.	H0402: 3		
HCUEV08	959670	597	198 - 353	10349	Gln-3 to Ser-9.	H0402: 2		
HCUEV17	905316	598	801 - 1223	10350	Lys-43 to Ser-51.	AR051: 9, AR050: 2, AR054: 1 H0402: 2 and H0306: 1.		
HCUEV65	750364	599	1 - 168	10351		H0306: 1 and H0402: 1.		
HCUEV82	881370	600	55 - 237	10352		H0402: 2		
HCUEW19	576513	601	3 - 221	10353	His-1 to Thr-7, Pro-9 to Gly-14, Cys-49 to Gly-54, Val-63 to Trp-70.	H0402: 2		
HCUEW58	850061	602	159 - 407	10354	Lys-8 to Gly-16, Ser-70 to Pro-76.	H0402: 2		
HCUEW71	881372	603	95 - 211	10355		H0306: 1, H0402: 1 and H0370: 1.		
HCUEX58	462365	604	1 - 201	10356		H0402: 2		
HCUEX74	953897	605	160 - 318	10357	Lys-26 to Leu-35.	H0402: 2		
HCUEY29	920419	606	232 - 390	10358	Glu-25 to Ala-32.	H0402: 3		
HCUEY48	576519	607	3 - 233	10359	Ser-34 to Gly-39.	H0402: 2		
HCUEZ88	576537	608	185 - 340	10360	Val-6 to Arg-14, Lys-25 to Pro-31.	H0402: 2		
HCUFA05	932116	609	135 - 329	10361		H0402: 2		
HCUFA38	675677	610	2 - 184	10362		S0298: 1, H0402: 1, L0520: 4q25 1 and L0758: 1.	137600, 189800, 217030, 248510, 600919, 601542	
HCUFB15	660460	611	75 - 269	10363	Asp-10 to Tyr-18, Ile-53 to Arg-65.	H0402: 3		
HCUFB89	746601	612	69 - 200	10364		H0402: 2		
HCUFC22	951134	613	1 - 171	10365		AR050: 53, AR051: 51, AR054: 51, AR061: 2, AR089: 1 H0402: 2		
HCUFD09	625728	614	3 - 215	10366		H0402: 2, H0306: 1 and L0748: 1.		
HCUFG64	576574	615	2 - 91	10367		H0402: 3		

HCUFH32	920281	616	55 - 240	10368	Met-23 to Glu-30, Leu-46 to Glu-51.	H0402: 2		
HCUFK94	722999	617	2 - 187	10369	Ala-1 to Gly-6, Pro-27 to Gly-41, Gly-44 to Arg-49, Gly-53 to Lys-62.	H0402: 2		
HCUFL02	932429	618	3 - 425	10370	Thr-24 to His-29, Ala-31 to Ala-36, Pro-40 to Gly-53, Phe-132 to Glu-137.	H0402: 2		
HCUFL15	575844	619	3 - 365	10371		H0402: 2		
HCUFL35	677853	620	102 - 287	10372	Lys-1 to Trp-9, Glu-12 to Trp-19, Lys-27 to Gln-32, Gln-54 to Lys-62.	H0402: 1, L0521: 1, L0792: 1 and H0576: 1.		
HCUFL77	575843	621	2 - 184	10373	Glu-10 to Ala-15, Ser-24 to Asn-36.	H0402: 2		
HCUFM60	730707	622	153 - 446	10374	Arg-6 to His-12, Pro-15 to Ser-25, Pro-28 to Leu-34, Ala-50 to Glu-56.	H0402: 2		
HCUFM65	576809	623	365 - 466	10375	Lys-1 to Thr-8, Arg-23 to Gly-31.	H0402: 2 and L0743: 1.		
HCUFN65	741927	624	2 - 460	10376		L0745: 3 and H0402: 2.		
HCUFP13	576582	625	1 - 198	10377	Gly-1 to Gly-6, Trp-32 to Thr-39, Leu-46 to Ser-57.	H0402: 2		
HCUFP76	861703	626	146 - 289	10378		H0306: 1 and H0402: 1.		
HCUFP91	575864	627	2 - 67	10379		H0402: 2		
HCUFQ80	709357	628	323 - 469	10380	Arg-14 to Ser-29.	S0114: 1 and H0402: 1.		
HCUFT26	575721	629	36 - 329	10381	Lys-18 to Phe-27, Arg-39 to Glu-47.	H0306: 1 and H0402: 1.		
HCUFU36	575831	630	1 - 165	10382	Arg-50 to Leu-55.	H0402: 2		
HCUFU49	953896	631	43 - 204	10383		H0402: 2		
HCUFU58	725891	632	429 - 223	10384	Ser-19 to Ser-25, Glu-46 to Ile-56.	L0596: 2, H0402: 1 and H0179: 1.		

HCUFU68	694410	633	161 - 325	10385			H0402: 3 and H0543: 1.		
HCUFU91	828083	634	2 - 226	10386	Ser-29 to Ser-38.		H0402: 2 and H0306: 1.		
HCUFV13	578459	635	260 - 370	10387			H0402: 1 and H0090: 1.		
HCUFV44	576650	636	65 - 265	10388	Leu-1 to Arg-20, Arg-55 to Tyr-61.		S0134: 1, H0402: 1 and L0665: 1.		
HCUFW41	850007	637	3 - 155	10389			H0402: 2, H0306: 1, L0659: 1 and L0599: 1.		
HCUFW61	862086	638	3 - 230	10390			H0402: 1 and H0576: 1.		
HCUFW75	575830	639	137 - 319	10391	Ser-7 to Trp-13, Arg-33 to Ala-38, Pro-40 to Ile-53.		H0402: 2		
HCUFW83	577263	640	164 - 415	10392	Ser-18 to Asn-33.		H0306: 1 and H0402: 1.		
HCUFX24	577266	641	3 - 188	10393			S0114: 1, H0402: 1, H0305: 1 and L0791: 1.		
HCUFX74	850067	642	296 - 60	10394	Gly-1 to Ser-6.		H0306: 1, H0402: 1 and S0216: 1.		
HCUFY27	669876	643	3 - 125	10395			H0306: 1 and H0402: 1.		
HCUFY35	577130	644	3 - 176	10396	His-1 to Ser-9, Pro-29 to His-36, Ser-46 to Cys-51.		H0306: 1 and H0402: 1.		
HCUFY40	967273	645	18 - 206	10397			H0402: 2		
HCUFZ81	878882	646	31 - 360	10398	Glu-27 to Thr-35.		H0402: 2		
HCUGB48	880730	647	173 - 361	10399			H0402: 1 and H0436: 1.		
HCUGC96	575825	648	302 - 478	10400			L0754: 2, H0341: 1 and H0402: 1.		
HCUGD15	660343	649	90 - 257	10401			L0599: 3 and H0402: 2.		
HCUGF18	666495	650	188 - 322	10402	Val-29 to Arg-35.		H0402: 2		
HCUGF61	741842	651	284 - 394	10403	Tyr-13 to Arg-19, Ser-26 to Phe-32.		H0306: 1 and H0402: 1.		
HCUGG25	678112	652	31 - 177	10404	Ala-27 to Lys-32.		H0402: 2		
HCUGH01	916600	653	180 - 329	10405	Trp-1 to Gly-7, Pro-28 to Ser-49.		H0402: 2 and L0748: 1.		
HCUGH30	778735	654	124 - 285	10406			L0749: 2, H0402: 1, L0740: 1 and H0423: 1.		
HCUGH34	706469	655	3 - 197	10407	Pro-1 to Gly-7, Ser-12 to Phe-20.		H0306: 1 and H0402: 1.		



HCUGH83	862078	656	82 - 186	10408	Val-15 to Arg-27.	H0306: 1 and H0402: 1.		
HCUGI29	584711	657	74 - 259	10409		H0402: 4, H0436: 1, L0748: 1 and L0749: 1.		
HCUGI54	715310	658	45 - 167	10410		H0402: 2		
HCUGJ35	850046	659	1 - 234	10411	Pro-18 to Ser-24.	H0402: 2		
HCUGK10	850035	660	103 - 360	10412	Pro-46 to Ser-51.	H0306: 1 and H0402: 1.		
HCUGK91	790218	661	3 - 149	10413		H0402: 1 and H0305: 1.		
HCUGL14	658467	662	151 - 255	10414		H0402: 2		
HCUGL84	496491	663	85 - 318	10415	Asn-6 to Gln-13, Asp-33 to Gly-38.	H0402: 2		
HCUGM08	959488	664	1 - 321	10416	Ser-27 to Glu-34.	H0402: 2		
HCUGN12	970727	665	6 - 131	10417	Asn-13 to Gly-20, Arg-29 to Asn-34.	L0749: 3 and H0402: 2.		
HCUGO02	920154	666	160 - 354	10418	Leu-7 to Leu-13, Cys-20 to His-27, Leu-32 to Arg-37.	H0402: 2		
HCUGP83	850029	667	1 - 159	10419		H0254: 1 and H0402: 1.		
HCUGQ16	917269	668	139 - 357	10420		H0306: 2 and H0402: 1.		
HCUGQ18	666474	669	134 - 316	10421	Pro-11 to Gly-16.	H0306: 1 and H0402: 1.		
HCUGR38	706471	670	3 - 317	10422	Ser-2 to His-7, Pro-14 to Leu-20, Ala-33 to Gly-38.	AR089: 1, AR061: 0 H0402: 1 and H0305: 1.		
HCUGR82	916538	671	296 - 439	10423	Tyr-6 to Trp-13.	H0402: 3 and L0529: 1.		
HCUGT92	692730	672	43 - 255	10424	Ile-1 to His-8, His-11 to Asn-20, Pro-40 to Lys-50.	H0402: 2		
HCUGU46	666815	673	120 - 212	10425		H0306: 1 and H0402: 1.		
HCUGV38	850032	674	2 - 175	10426		H0402: 2		
HCUGV60	496443	675	20 - 238	10427	Pro-19 to Glu-39, Glu-48 to Glu-58.	H0306: 1 and H0402: 1.		
HCUGW04	960596	676	64 - 270	10428	Glu-1 to Gly-8.	H0402: 2		
HCUGY26	953550	677	290 - 454	10429	Lys-15 to Lys-29.	L0748: 3, H0402: 2, H0075: 1 and H0439: 1.		
HCUGZ15	792418	678	193 - 369	10430		H0402: 1 and H0444: 1.		
HCUHA63	745094	679	75 - 239	10431		H0402: 1 and H0318: 1.		

HCUHA74	576850	680	288 - 446	10432	Val-15 to Ala-21, Lys-32 to Gly-38.	H0305: 2, H0589: 2 and H0402: 1.		
HCUHB30	850018	681	81 - 245	10433		H0306: 1, H0402: 1, L0556: 1, L0532: 1 and L0756: 1.		
HCUHC25	920830	682	1 - 228	10434	Leu-10 to Arg-26.	S0114: 1 and H0402: 1.		
HCUHC41	712343	683	1 - 366	10435	Gly-9 to Gly-15.	H0306: 1 and H0402: 1.		
HCUHC45	671212	684	129 - 323	10436	Pro-28 to Gln-34, Ser-42 to Ile-57.	H0306: 1 and H0402: 1.		
HCUHC69	693007	685	26 - 139	10437	Asn-1 to Glu-7.	H0306: 2 and H0402: 1.		
HCUHD50	650854	686	264 - 410	10438		H0402: 2		
HCUHD55	705384	687	91 - 390	10439	Ala-6 to Phe-19, Arg-37 to Trp-47, Ser-64 to Gly-72, His-79 to Arg-100.	H0341: 1, H0402: 1 and S0053: 1.		
HCUHE23	675910	688	1 - 297	10440	Gly-1 to Gln-6, Thr-54 to Gly-65.	H0306: 1 and H0402: 1.		
HCUHE31	693311	689	196 - 354	10441		H0306: 1, H0402: 1 and H0305: 1.		
HCUHE43	754187	690	60 - 272	10442		H0306: 1 and H0402: 1.		
HCUHE48	835917	691	57 - 329	10443		L0662: 2, S0114: 1, H0402: 1 and L0766: 1.		
HCUHE76	666599	692	98 - 253	10444		H0402: 2		
HCUHF12	970685	693	240 - 446	10445	Gly-14 to Arg-22, Gln-35 to Ala-41.	H0306: 1 and H0402: 1.		
HCUHF41	878528	694	223 - 459	10446	Pro-25 to Gln-30, Leu-71 to Gln-79.	AR051: 37, AR054: 25, AR050: 23		
HCUHH14	658452	695	48 - 209	10447	Gln-29 to Ile-36.	H0306: 1 and H0402: 1. L0764: 1.		
HCUHI34	923803	696	184 - 516	10448	Gln-1 to His-13, Met-18 to His-24.	H0402: 1 and H0486: 1.		
HCUHI54	720378	697	63 - 242	10449	Gln-4 to Arg-17.	H0402: 2		
HCUHJ12	970782	698	1 - 219	10450	Pro-13 to Ser-22.	H0402: 2		
HCUHJ15	577304	699	3 - 416	10451	Leu-10 to Trp-18, Pro-31 to Gln-36, Asp-46 to Thr-57.	H0306: 1 and H0402: 1.		

HCUHJ30	966583	700	132 - 431	10452	Arg-26 to Ile-31, His-34 to Lys-39, Phe-47 to Arg-54.	H0402: 1, H0580: 1 and H0488: 1.		
HCUHJ58	575796	701	158 - 364	10453	Pro-32 to Arg-37.	H0402: 2		
HCUHM44	615198	702	2 - 109	10454	Lys-1 to Pro-26.	H0402: 2		
HCUHM61	576561	703	37 - 327	10455	Ile-3 to Arg-10, Gly-59 to Lys-69.	H0402: 2		
HCUHM94	736095	704	93 - 263	10456	Lys-1 to Gly-8.	H0402: 2		
HCUHO60	576563	705	3 - 272	10457	Ser-1 to Gly-14, Val-17 to Pro-31, Lys-39 to Thr-45, Ser-51 to Glu-56, Ala-72 to Trp-85.	H0402: 2		
HCUHP20	669737	706	53 - 196	10458		H0402: 2 and L0601: 1.		
HCUHQ13	575803	707	133 - 318	10459	Ser-4 to His-16.	H0402: 2		
HCUHQ33	575800	708	3 - 353	10460	Lys-43 to Tyr-53, Ser-89 to Arg-95.	H0402: 2		
HCUHQ37	850010	709	76 - 270	10461	Leu-42 to Glu-55.	H0341: 1, H0402: 1 and L0748: 1.		
HCUHQ74	765638	710	30 - 311	10462	Gly-7 to Arg-13, Gly-33 to His-39, Gly-46 to Val-51, Pro-75 to Lys-90.	H0402: 1 and H0444: 1.		
HCUHS19	566809	711	48 - 200	10463	Leu-9 to Ser-17.	AR054: 29, AR051: 24, AR050: 13 H0402: 2, H0306: 1, L0659: 1 and L0599: 1.		
HCUHS60	850009	712	29 - 190	10464	Pro-1 to Gly-13.	H0306: 1 and H0402: 1.		
HCUHT21	577265	713	61 - 135	10465		H0306: 1 and H0402: 1.		
HCUHT56	722649	714	110 - 379	10466	Leu-31 to Leu-37, Pro-39 to Val-60, Arg-80 to Gln-90.	H0402: 1 and H0445: 1.		
HCUHU68	577795	715	225 - 1	10467	Lys-1 to Asp-7, Lys-48 to Ser-54.	H0254: 1 and H0402: 1.		
HCUHW54	730716	716	1 - 114	10468	Gly-1 to Thr-11, Thr-24 to Pro-31.	H0402: 2		

HCUHW59	739329	717	2 - 178	10469		H0402: 3	
HCUHY49	577887	718	17 - 226	10470		H0306: 1 and H0402: 1.	
HCUJA48	721719	719	2 - 124	10471	Lys-27 to Leu-40.	H0306: 1 and H0402: 1.	
HCUJJ35	713818	720	339 - 482	10472	Glu-1 to Leu-12.	S0052: 2 and H0402: 1.	
HCUJL80	577172	721	71 - 3	10473	Cys-11 to Gly-20.	H0306: 1 and H0402: 1.	
HCUJM51	725724	722	3 - 290	10474		H0306: 1 and H0402: 1.	
HCUJN18	666537	723	1 - 195	10475	Phe-11 to Ser-17, Pro-45 to Ala-53.	H0306: 1 and H0402: 1.	
HCUJO82	883812	724	149 - 337	10476	Gly-10 to Arg-15.	H0306: 1 and H0402: 1.	
HCVAC18	889480	725	88 - 192	10477		AR050: 9, AR054: 5, AR051: 0 H0300: 2	
HCWAA20	669991	726	3 - 83	10478	Gln-1 to Lys-10.	H0305: 2	
HCWAB01	921689	727	90 - 218	10479		H0305: 3	
HCWAB44	669714	728	183 - 326	10480	Asp-1 to Lys-17.	H0305: 2	
HCWAB50	724684	729	79 - 153	10481	Phe-18 to Val-24.	H0556: 1, H0305: 1 and S0002: 1.	
HCWAB56	507283	730	17 - 157	10482		H0305: 2	
HCWAB67	529658	731	53 - 124	10483		H0305: 2	
HCWAB80	959937	732	1 - 153	10484		H0305: 2	
HCWAB92	523447	733	43 - 159	10485	Ser-1 to Thr-6, Tyr-22 to Thr-27.	H0305: 2	
HCWAC68	529653	734	2 - 205	10486	Gly-1 to Ser-18, Gly-30 to Thr-38.	H0305: 3	
HCWAE16	660280	735	1 - 168	10487	Val-11 to Arg-18, Arg-49 to Arg-56.	H0305: 2	
HCWAE50	655130	736	132 - 224	10488	Tyr-1 to Lys-14.	H0305: 3	
HCWAF02	920993	737	101 - 391	10489	Pro-1 to Gln-8.	H0305: 2, H0589: 1 and S0428: 1.	
HCWAF45	723452	738	2 - 148	10490	Arg-1 to His-10, Ile-22 to Lys-27.	H0305: 2 and L0774: 1.	
HCWAF60	523354	739	56 - 268	10491		H0305: 2	
HCWAF80	529498	740	2 - 223	10492	Ala-9 to Glu-15.	H0305: 2	
HCWAG20	839796	741	91 - 228	10493	Ser-36 to Arg-46.	H0305: 2 and H0589: 2.	
HCWAG70	529357	742	61 - 321	10494	Glu-1 to Gly-6.	H0305: 2 and H0589: 1.	

HCWAH52	574929	743			24 - 221	10495	Thr-20 to Ser-29, Lys-46 to Arg-59.		H0305: 2	
HCWAJ93	523536	744			3 - 335	10496	Leu-20 to Gly-29, Thr-36 to Ser-43.		H0305: 2 and H0264: 1.	
HCWAJ55	529361	745			1 - 81	10497	Pro-10 to Arg-20.		H0305: 2	
HCWAJ58	740987	746			213 - 365	10498	Ser-4 to His-12.		H0305: 2	
HCWAK51	751640	747			133 - 309	10499			H0305: 2	
HCWAK80	702435	748			187 - 483	10500	Thr-21 to Ser-34, Tyr-46 to Phe-54.		S0114: 2, H0305: 2 and H0589: 1.	
HCWAL14	861958	749			79 - 345	10501	Arg-3 to Asp-9.		H0305: 2	
HCWAL22	579046	750			83 - 481	10502	Pro-39 to Asp-45, Pro-63 to Gly-71, Tyr-78 to Trp-91.		H0589: 2, H0402: 1 and H0305: 1.	
HCWAL39	861893	751			55 - 315	10503	Lys-11 to Ser-21, Gln-26 to Asp-35, Gln-58 to Gln-66.		H0305: 4 and S0052: 1.	
HCWAM08	960170	752			43 - 108	10504	Lys-12 to Gly-22.		H0305: 2 and H0589: 2.	
HCWAM39	529349	753			1 - 183	10505			H0305: 1 and S0052: 1.	
HCWAM49	849980	754			145 - 507	10506			H0305: 6 and H0589: 1.	
HCWAN17	966646	755			333 - 133	10507	Phe-11 to Trp-17, Glu-33 to Val-46, Trp-48 to Leu-56.		H0402: 3, H0305: 2, S0114: 1 and H0589: 1.	
HCWAN55	928116	756			57 - 389	10508	Pro-7 to Gly-13, Gly-41 to Asp-46.		H0305: 11	
HCWAP63	523259	757			182 - 400	10509	Glu-22 to Ala-29.		H0305: 3	
HCWAP66	889439	758			40 - 168	10510	Gln-18 to Ser-23.		AR050: 2, AR051: 1 H0305: 2	
HCWAR05	932623	759			2 - 373	10511	Glu-9 to Lys-15, Pro-89 to Arg-100.		H0305: 2	
HCWAR59	916461	760			2 - 391	10512	Gln-2 to Trp-18, Pro-46 to Val-64, Arg-70 to Arg-85, Asp-90 to Gln-102, Glu-115 to Gly-123.		H0305: 7 and H0589: 1.	
HCWAR63	523255	761			187 - 357	10513	Gly-11 to His-19		H0305: 4	

HCWAR76	529652	762	283 - 501	10514	Gln-36 to Gln-44.	H0305: 3 and H0589: 2.		
HCWAR84	529241	763	54 - 212	10515	Trp-12 to Thr-17.	H0305: 2		
HCWAT16	523125	764	151 - 315	10516		H0305: 3		
HCWAT59	529236	765	1 - 243	10517	Gly-4 to Ala-10, Gln-22 to Ser-29, Gln-35 to Ser-41, Ala-56 to Gly-71.	H0305: 4 and H0589: 1.		
HCWAU26	849902	766	103 - 276	10518	Pro-9 to Gly-15.	H0305: 6		
HCWAU89	589836	767	87 - 293	10519	Ala-1 to Pro-14, Pro-21 to Tyr-29, Phe-58 to Leu-69.	H0305: 3 and H0589: 1.		
HCWAV75	849976	768	45 - 203	10520	Lys-8 to His-16.	H0305: 2		
HCWAY41	542388	769	137 - 328	10521	Arg-7 to Pro-12, Gly-28 to Lys-38.	H0305: 9		
HCWAZ16	529227	770	166 - 342	10522	Ser-17 to Trp-22.	H0305: 2		
HCWAZ43	849892	771	68 - 289	10523	Val-28 to Arg-38.	H0305: 5 and H0589: 1.		
HCWAZ66	523243	772	176 - 409	10524		H0305: 2		
HCWAZ73	523299	773	51 - 296	10525	Thr-22 to Thr-27.	H0305: 3		
HCWAZ91	529226	774	1 - 396	10526	Asp-30 to Asp-35.	H0305: 2 and H0589: 1.		
HCWBA18	529224	775	61 - 135	10527		H0305: 2		
HCWBA21	937631	776	88 - 276	10528	Phe-15 to Ser-21, Lys-50 to Asn-63.	H0305: 2 and L0361: 1.		
HCWBA49	723359	777	29 - 184	10529	Ser-16 to Phe-24.	H0305: 4 and L0794: 2.		
HCWBA50	835532	778	1 - 183	10530		H0305: 6		
HCWBA55	529222	779	11 - 301	10531	Lys-1 to Cys-15.	H0305: 3 and H0589: 1.		
HCWBA64	715579	780	90 - 278	10532	Glu-1 to Gly-12.	H0305: 4		
HCWBB27	967045	781	87 - 299	10533	Lys-1 to Ser-6.	H0305: 2		
HCWBB63	667283	782	3 - 323	10534	Arg-3 to Ser-9, Asp-29 to Ser-34.	AR061: 0, AR089: 0 H0305: 3		
HCWBC16	529350	783	1 - 222	10535	Gly-33 to Pro-41.	H0305: 2		
HCWBC28	584778	784	3 - 278	10536	Glu-1 to Asn-23.	H0305: 2		
HCWBC32	574909	785	202 - 333	10537		H0305: 2		
HCWBC54	573188	786	10 - 108	10538		H0305: 2		
HCWBC61	728666	787	87 - 239	10539		H0305: 2		

HCWBC69	849971	788	1 - 126	10540	His-26 to Thr-31, Gly-36 to Tyr-42.	H0305: 2		
HCWBC71	784052	789	1 - 48	10541		H0305: 2		
HCWBC81	849974	790	1 - 261	10542		H0305: 2		
HCWBD54	706513	791	18 - 251	10543	Tyr-10 to Ile-16.	H0305: 3		
HCWBE25	529216	792	1 - 141	10544		H0305: 2		
HCWBE37	542403	793	42 - 320	10545		H0305: 4 and H0589: 1.		
HCWBE49	932196	794	220 - 420	10546	Gly-10 to Gly-17.	H0305: 8		
HCWBE51	782317	795	220 - 411	10547		H0305: 2 and H0589: 2.		
HCWBE58	773587	796	- 2 - 175	10548	Gln-12 to Ser-17.	H0305: 2		
HCWBE69	723717	797	27 - 242	10549		H0305: 2, S0114: 1 and L0752: 1.		
HCWBE71	688011	798	295 - 405	10550		H0305: 5		
HCWBE76	968515	799	1 - 171	10551	Thr-2 to Arg-56.	H0305: 2		
HCWBG06	954670	800	1 - 72	10552		H0305: 2		
HCWBG30	920530	801	2 - 301	10553	Ala-1 to Arg-8, Lys-25 to Thr-30, His-32 to Gln-37, Arg-46 to Ser-59, His-65 to Trp-71, Arg-76 to Arg-82.	H0305: 3		
HCWBG40	676588	802	270 - 473	10554	Lys-1 to Arg-6.	H0305: 2 and H0589: 1.		
HCWBG41	839014	803	95 - 280	10555	Arg-25 to Ser-34, Gly-40 to Ser-45.	H0305: 4		
HCWBG43	689743	804	42 - 167	10556	Arg-34 to Pro-41.	H0305: 3		
HCWBG77	529229	805	115 - 288	10557	Pro-13 to Lys-23.	H0305: 3		
HCWBG91	789318	806	3 - 83	10558		H0305: 2		
HCWBI17	954153	807	149 - 3	10559	Ser-17 to Asn-27.	H0305: 3		
HCWBI24	529211	808	1 - 126	10560		H0305: 2		
HCWBI37	967717	809	3 - 209	10561	Trp-10 to Gly-17, Pro-42 to Asp-48, Asp-57 to Asp-67.	H0305: 3 and H0589: 1.		
HCWBI53	934909	810	105 - 305	10562	Arg-1 to Ser-13, Pro-25 to Pro-31.	H0305: 5 and H0589: 2.		
HCWBI77	529238	811	32 - 229	10563	His-39 to Pro-46,	H0305: 2		

HCWBI90	921653	812	2 - 355	10564	Cys-58 to Trp-66.	H0305: 3 and H0589: 1.		
HCWBJ02	917300	813	14 - 283	10565	Lys-12 to Glu-22, Thr-49 to Thr-55.	H0305: 3		
HCWBJ27	784524	814	3 - 140	10566		H0305: 4		
HCWBJ61	849967	815	42 - 269	10567	Arg-8 to Asn-15, Ser-17 to Ser-25, Gln-28 to Leu-34, Pro-52 to Val-65.	H0305: 6		
HCWBJ66	529228	816	2 - 100	10568	Arg-18 to Leu-27.	H0305: 2		
HCWBJ75	935579	817	245 - 421	10569	Ser-1 to Arg-6, Leu-13 to Glu-26.	H0306: 1, H0402: 1, H0305: 1, L0605: 1 and H0543: 1.		
HCWBJ81	849977	818	2 - 124	10570		H0305: 2		
HCWBJ86	719521	819	38 - 157	10571	Ser-23 to Asn-28.	H0305: 3		
HCWBL38	935481	820	136 - 261	10572		H0305: 3		
HCWBL41	666457	821	2 - 151	10573	Tyr-3 to Ser-10.	H0305: 2		
HCWBM04	861842	822	133 - 342	10574	Leu-48 to Leu-53.	H0305: 2 and H0589: 1.		
HCWBM50	577712	823	200 - 355	10575	Gln-10 to Lys-22.	H0305: 2		
HCWBM95	849932	824	56 - 268	10576		H0305: 5 and H0589: 1.		
HCWBN06	924638	825	2 - 373	10577	Gly-1 to Asn-6.	H0305: 5		
HCWBO10	842038	826	104 - 244	10578		H0305: 6		
HCWBO23	964590	827	2 - 148	10579	His-2 to Pro-9.	H0305: 2		
HCWBO94	574861	828	87 - 344	10580	Glu-10 to Gly-22, Leu-26 to Ala-35, Pro-52 to Ala-59, Ser-68 to Leu-74.	H0305: 2		
HCWBP27	684336	829	166 - 318	10581	Cys-5 to Asp-17, Leu-19 to Ala-27.	H0589: 2 and H0305: 1.		
HCWBP56	733662	830	1 - 204	10582	Ala-35 to Ser-40.	H0305: 2		
HCWBP70	757467	831	117 - 338	10583	Tyr-22 to Trp-28.	H0305: 1 and H0589: 1.		
HCWBP74	765881	832	87 - 200	10584		H0305: 3		
HCWBP85	849969	833	3 - 371	10585	Ser-54 to His-61.	H0305: 12, H0589: 1 and L0369: 1.		
HCWBQ03	920886	834	3 - 311	10586		H0305: 5		
HCWBQ36	557873	835	22 - 222	10587	Leu-53 to Pro-67.	H0305: 2		



HCWBQ70	706526	836	1 - 387	10588	Asp-6 to Phe-11, Ile-31 to Phe-37, Arg-82 to His-87, Glu-95 to Gln-101.	H0589: 2 and H0305: 1.		
HCWBQ74	526537	837	43 - 201	10589	Gln-6 to Gly-12.	H0305: 2		
HCWBQ88	527694	838	53 - 172	10590		H0305: 2		
HCWBR06	527692	839	1 - 210	10591		H0305: 3 and L0777: 1.		
HCWBR89	967726	840	74 - 352	10592		H0305: 3 and H0589: 1.		
HCWBS66	574850	841	2 - 133	10593	Val-28 to Gly-44.	H0305: 2		
HCWBS67	842037	842	191 - 382	10594	Phe-15 to Arg-24, Pro-46 to Thr-57.	H0305: 3		
HCWBS96	954028	843	149 - 343	10595		H0305: 2 and H0556: 1.		
HCWBT30	523249	844	3 - 353	10596		H0305: 3 and H0589: 1.		
HCWBT31	720016	845	106 - 297	10597	His-33 to Lys-42.	H0589: 2, H0305: 1 and L0779: 1.		
HCWBT48	527676	846	3 - 98	10598	Gly-1 to Gly-9.	H0305: 2		
HCWBT86	927506	847	18 - 152	10599	Leu-9 to Leu-17, Gln-27 to His-34.	H0305: 1 and H0589: 1.		
HCWBU09	527562	848	2 - 151	10600	Arg-14 to Gly-20.	H0305: 2 and S0134: 1.		
HCWBU24	861864	849	92 - 337	10601		H0305: 5		
HCWBU49	850014	850	195 - 1	10602	Arg-1 to Trp-13, Lys-24 to Cys-43.	AR050: 16, AR051: 12, AR054: 7 H0305: 2		
HCWBU72	668350	851	219 - 371	10603	Tyr-17 to Tyr-22.	H0305: 1 and H0589: 1.		
HCWBU09	746335	852	155 - 355	10604	Gly-20 to Glu-26, Ser-39 to Ser-53.	H0305: 3 and H0589: 1.		
HCWBU51	725889	853	90 - 329	10605	Leu-7 to Cys-12.	H0305: 2		
HCWBU96	796584	854	198 - 410	10606	Glu-8 to Thr-13, Ala-37 to Leu-50.	H0457: 2, H0305: 1, L0363: 1 and H0444: 1.		
HCWBU63	527081	855	101 - 3	10607		H0305: 2		
HCWBU65	970694	856	108 - 10	10608	Glu-1 to Leu-8.	H0305: 3		
HCWBU67	506730	857	2 - 310	10609		H0305: 2		
HCWBU75	767491	858	3 - 98	10610		H0305: 2		
HCWBU78	706521	859	194 - 391	10611		H0305: 4 and H0589: 1.		
HCWCA51	849923	860	111 - 332	10612		H0305: 2 and H0445: 1.		

HCWCB37	527683	861	1 - 210	10613		H0305: 3	
HCWCB80	529234	862	2 - 163	10614		H0305: 2	
HCWCB89	542340	863	188 - 75	10615		H0305: 5	
HCWCC62	967306	864	183 - 344	10616		H0305: 3 and H0589: 1.	
HCWCC77	527077	865	110 - 292	10617	Gly-11 to Gly-27.	H0305: 4 and H0589: 1.	
HCWCC82	705347	866	2 - 355	10618		H0305: 2	
HCWCE02	849968	867	2 - 232	10619	Ser-31 to Trp-43, Arg-48 to Gly-58.	H0305: 4	
HCWCE21	523224	868	296 - 553	10620		H0305: 4 and L0731: 1.	
HCWCE35	706489	869	27 - 215	10621		H0305: 2	
HCWCE63	527678	870	17 - 256	10622	Leu-15 to Gln-20, Thr-26 to Arg-35.	H0305: 2	
HCWCE69	757800	871	92 - 268	10623	Pro-14 to Gln-20, Arg-50 to Thr-59.	H0305: 2	
HCWCE71	932549	872	62 - 205	10624		H0305: 3	
HCWCE86	964648	873	167 - 403	10625	Ser-33 to Ser-38.	H0305: 8	
HCWCF04	615626	874	1 - 51	10626	Gly-1 to Gly-7.	H0305: 2	
HCWCF06	954580	875	3 - 218	10627		H0305: 2	
HCWCF91	527558	876	1 - 276	10628		H0305: 3	
HCWCF94	952684	877	1 - 186	10629	Gly-1 to Ala-13.	H0305: 1 and H0589: 1.	
HCWCG31	527090	878	147 - 401	10630	Arg-1 to Val-11, Ala-75 to Gln-85.	H0305: 4, H0589: 2 and S0053: 1.	
HCWCG62	575336	879	57 - 266	10631	Arg-6 to Pro-15.	H0305: 2	
HCWCH01	920706	880	3 - 278	10632	Gly-17 to Thr-25.	H0305: 4	
HCWCH22	675011	881	34 - 144	10633	Gly-4 to Leu-9, Leu-11 to Arg-16.	H0305: 2	
HCWCH45	577704	882	3 - 305	10634	Val-23 to Gln-30, Asn-66 to Leu-73.	H0305: 2	
HCWCI01	921586	883	1 - 168	10635	Met-30 to Pro-35.	H0305: 2	
HCWCI38	556358	884	3 - 494	10636	Gly-17 to Ser-27.	H0305: 9 and H0589: 2.	
HCWCI86	790718	885	60 - 161	10637		H0305: 3 and H0589: 1.	
HCWCJ85	529243	886	215 - 337	10638	Arg-14 to Pro-19.	H0305: 2	
HCWCL10	888992	887	233 - 478	10639		H0305: 6	
HCWCL62	715981	888	76 - 312	10640	Thr-12 to Asp-17, Ser-36 to Lys-59.	H0305: 1 and H0589: 1.	

HCWCL67	751963	889	1 - 126	10641			H0305: 3		
HCWCM16	667392	890	2 - 142	10642	Cys-29 to Ser-35.		H0305: 2		
HCWCM65	529230	891	1 - 360	10643	Ser-45 to His-58.		AR089: 3, AR061: 1 H0305: 2 and H0589: 1.		
HCWCM96	963564	892	124 - 237	10644			H0305: 3 and H0589: 1.		
HCWCN25	518793	893	71 - 229	10645	Ile-6 to Trp-12.		H0305: 2		
HCWCN40	835584	894	60 - 203	10646			H0305: 8 and H0589: 1.		
HCWCN45	723418	895	277 - 378	10647	Lys-1 to Tyr-15.		H0305: 1 and H0521: 1.		
HCWCN61	924894	896	42 - 308	10648			H0305: 3		
HCWCN92	527088	897	2 - 175	10649			H0305: 2 and L0753: 1.		
HCWCO02	920876	898	22 - 261	10650			H0305: 1 and H0589: 1.		
HCWCO21	523225	899	2 - 157	10651	Ala-7 to Ala-12, Arg-33 to Trp-44.		H0305: 2		
HCWCO35	706490	900	93 - 374	10652	Glu-47 to Pro-54, Ala-72 to Arg-79.		H0305: 1 and H0589: 1.		
HCWCO54	558274	901	84 - 182	10653			H0305: 3 and H0589: 1.		
HCWCO63	557917	902	125 - 274	10654	Gly-39 to Pro-44.		H0305: 3		
HCWCO72	527546	903	91 - 213	10655	Gly-17 to Gln-26.		H0305: 2		
HCWCO77	772515	904	1 - 102	10656	Gly-1 to Pro-7, Arg-25 to Ser-32.		H0305: 1 and H0589: 1.		
HCWCP68	573148	905	1 - 162	10657	Pro-6 to Phe-14.		H0305: 2, S0114: 1 and L0527: 1.		
HCWCQ15	527688	906	191 - 325	10658	Phe-28 to Pro-33.		H0305: 2		
HCWCQ48	531423	907	3 - 71	10659			H0305: 2		
HCWCQ95	723610	908	2 - 112	10660	Pro-2 to Arg-11.		H0305: 2		
HCWCR31	693632	909	31 - 411	10661			AR089: 42, AR061: 4 H0305: 2, L0483: 1, L0764: 1, L0747: 1, L0756: 1 and L0758: 1.	12q	
HCWCR64	526482	910	3 - 185	10662	Thr-1 to Lys-6, Arg-52 to Ala-57.		H0305: 2		
HCWCS12	585202	911	7 - 237	10663	Thr-22 to Trp-28, Lys-36 to Lys-47, Lys-71 to Pro-77.		H0305: 3		
HCWCS51	921636	912	1 - 123	10664			H0305: 3		

HCWCT07	954070	913	104 - 271	10665			H0305: 2		
HCWCT23	676336	914	30 - 191	10666	Gln-5 to Trp-13.		H0305: 3		
HCWCT48	741925	915	198 - 365	10667			H0305: 2 and H0589: 1.		
HCWCT85	527543	916	125 - 214	10668			H0305: 2		
HCWCU01	921618	917	2 - 154	10669	Lys-16 to Asp-25.		H0305: 2, L0518: 1 and L0593: 1.		
HCWCU17	577688	918	14 - 139	10670	Met-20 to Tyr-25.		H0305: 2		
HCWCU32	725584	919	1 - 441	10671			AR051: 399, AR050: 312, AR054: 268 H0305: 8		
HCWCU57	764602	920	46 - 261	10672	Glu-23 to Val-28, Phe-67 to Arg-72.		H0305: 3, L0805: 1 and H0543: 1.		
HCWCU58	527695	921	3 - 269	10673	Lys-1 to Lys-7.		H0305: 2		
HCWCU63	527541	922	2 - 175	10674			H0305: 3		
HCWCU94	713416	923	3 - 272	10675			H0305: 1 and H0589: 1.		
HCWCV01	921569	924	101 - 238	10676			H0305: 2		
HCWCV09	861950	925	217 - 432	10677			H0305: 5		
HCWCV16	861839	926	3 - 377	10678	Glu-6 to Asn-11, Pro-21 to Thr-26.		H0305: 3 and H0589: 1.		
HCWCV58	966512	927	180 - 326	10679	Ser-1 to Arg-6, Pro-15 to Thr-27.		H0305: 1 and H0589: 1.		
HCWCV75	527080	928	3 - 239	10680	Gly-14 to Trp-31.		H0305: 4		
HCWCV85	966987	929	116 - 247	10681			H0305: 3		
HCWCV93	792550	930	2 - 88	10682			H0305: 2		
HCWCX18	574933	931	89 - 256	10683	Glu-1 to Ala-6, Gln-31 to Thr-36.		H0305: 5 and H0589: 1.		
HCWCY16	507191	932	110 - 229	10684			H0305: 2		
HCWCZ33	523265	933	3 - 200	10685			H0305: 9		
HCWDB74	521894	934	76 - 279	10686	Thr-23 to Ser-29.		H0305: 3		
HCWDB94	531417	935	77 - 277	10687			H0305: 2		
HCWDD15	660571	936	2 - 277	10688			H0305: 1, L0664: 1 and H0444: 1.		
HCWDD60	575555	937	2 - 130	10689			H0305: 4		
HCWDG46	715509	938	65 - 160	10690	Lys-3 to Leu-15.		H0305: 2		
HCWDG49	861951	939	3 - 461	10691	Phe-16 to Arg-24,		H0305: 2		

HCWDH65	574250	940	297 - 479	10692	Ser-35 to Arg-41.	H0305: 2		
HCWDH85	574262	941	53 - 181	10693		H0305: 2		
HCWDH92	790618	942	16 - 198	10694	Leu-18 to His-23.	H0305: 1 and H0589: 1.		
HCWDI37	849867	943	159 - 329	10695	Gln-3 to Ser-9.	H0305: 5		
HCWDI43	527685	944	32 - 274	10696	Arg-24 to Trp-40, Phe-49 to Ser-54, Gly-63 to Trp-71.	H0305: 2		
HCWDI64	924632	945	72 - 185	10697		H0305: 2		
HCWDI72	573034	946	49 - 177	10698	Arg-16 to Thr-27, Leu-34 to Pro-43.	H0305: 2		
HCWDI79	526765	947	18 - 143	10699		H0305: 3		
HCWDI82	671636	948	2 - 208	10700	Pro-10 to Gly-15, Ala-38 to Arg-43, Ser-52 to Pro-59.	H0305: 2		
HCWDI89	953750	949	248 - 460	10701	Ser-1 to Gln-10, Pro-49 to Lys-59.	H0305: 3, L0749: 3, L0748: 2, H0589: 1, L0481: 1, L0772: 1 and L0589: 1.		
HCWDI92	733422	950	34 - 189	10702	Glu-45 to Ala-52.	H0305: 2		
HCWDI21	524780	951	97 - 279	10703		H0305: 3		
HCWDI23	527555	952	1 - 360	10704	Thr-2 to Ala-10.	AR089: 0, AR061: 0 H0305: 2		
HCWDI31	531418	953	91 - 240	10705	Gly-1 to Ser-12, Ser-19 to Gly-27.	H0305: 2		
HCWDI45	523227	954	49 - 435	10706	Glu-1 to Gln-6, Pro-21 to Trp-26.	H0305: 3		
HCWDI89	697736	955	141 - 422	10707	Asn-5 to Thr-13.	H0589: 2, H0305: 1 and H0444: 1.		
HCWDL19	669721	956	55 - 222	10708	Ser-19 to Glu-36.	H0305: 3 and L0766: 1.		
HCWDL45	889416	957	118 - 282	10709	Ala-33 to Ile-42.	AR089: 16, AR061: 4 H0305: 6 and S0052: 1.		
HCWDL68	752320	958	2 - 175	10710	Ala-1 to Asn-8, Ser-44 to Arg-51.	H0305: 1 and S0052: 1.		
	752857	9549	418 - 56	19301				
HCWDM02	920563	959	155 - 379	10711	Ser-44 to Asn-49.	H0305: 2		
HCWDM06	935898	960	1 - 189	10712		H0305: 3		

HCWDM07	953742	961	202 - 480	10713		H0305: 3		
HCWDM14	849962	962	85 - 291	10714		H0305: 5 and L0375: 1.		
HCWDM23	676215	963	142 - 303	10715	Asn-5 to Gln-14.	H0305: 2 and H0589: 1.		
HCWDM60	754785	964	80 - 337	10716		H0305: 4 and H0589: 1.		
HCWDM79	578967	965	2 - 274	10717	Glu-53 to Gly-58.	H0305: 1 and H0589: 1.		
HCWDN15	557862	966	92 - 205	10718		H0305: 2 and L0020: 1.		
HCWDN60	861882	967	1 - 285	10719	Gly-3 to Phe-12, Ala-70 to Ala-77.	H0305: 2 and L0657: 1.		
HCWDO11	967364	968	162 - 353	10720	Pro-22 to His-31.	H0305: 3		
HCWDO56	961273	969	106 - 369	10721	Glu-19 to Gly-24, Ala-39 to Leu-45, Pro-56 to Trp-64.	H0305: 13 and H0253: 1.		
HCWDO65	920523	970	66 - 314	10722	Asp-18 to Leu-27, Lys-51 to Lys-62.	H0305: 4		
HCWDP85	747141	971	162 - 296	10723	Asn-14 to Lys-25.	H0305: 2		
HCWDQ35	573577	972	2 - 286	10724	Thr-11 to Thr-16.	H0305: 2		
HCWDR01	839104	973	3 - 479	10725	Arg-78 to Lys-97.	AR089: 1, AR061: 0 H0305: 4 and H0589: 1.		
HCWDR42	529354	974	95 - 298	10726		H0305: 2		
HCWDR63	849899	975	249 - 503	10727	Asp-35 to Pro-52.	H0305: 3 and H0580: 1.		
HCWDR86	527690	976	2 - 253	10728		H0305: 4 and L0748: 1.		
HCWDR89	787025	977	114 - 296	10729	Arg-1 to Asp-7.	H0305: 2		
HCWDS10	880973	978	210 - 422	10730		H0305: 3		
HCWDS19	418009	979	2 - 217	10731	Ala-6 to Ser-11.	H0305: 2		
HCWDS26	684696	980	81 - 305	10732	Phe-5 to Gly-10, Pro-32 to Cys-40.	H0305: 1 and H0589: 1.		
HCWDS40	523301	981	182 - 439	10733	Arg-1 to Thr-8.	H0305: 5 and H0589: 1.		
HCWDS41	669754	982	3 - 365	10734	Asp-8 to Ala-21, Pro-23 to Ala-32, Leu-34 to Val-49.	H0305: 3		
HCWDS48	861849	983	163 - 438	10735	Arg-10 to Gln-25, Ser-69 to Phe-84.	H0305: 2, H0589: 1 and L0520: 1.		
HCWDS52	771881	984	46 - 204	10736	Tyr-23 to Lys-29.	H0305: 2 and H0589: 1.		
HCWDS55	861943	985	26 - 454	10737	Arg-4 to Gly-10, Ser-13 to Asn-18.	H0305: 3		

HCWDS59	934914	986	248 - 430	10738	Gln-29 to Val-36.	H0305: 2 and H0589: 2.		
HCWDS61	741992	987	136 - 393	10739	Arg-9 to Arg-19.	H0305: 2		
HCWDS83	612257	988	181 - 492	10740		H0305: 2		
HCWDS91	557931	989	98 - 445	10741	Asn-8 to Gly-13.	H0305: 2		
HCWDS94	959650	990	3 - 191	10742	Ser-2 to Ser-7, Ala-16 to Ala-29.	H0305: 8		
HCWDT12	573487	991	146 - 301	10743	Tyr-34 to Cys-40.	H0305: 2		
HCWDT84	542238	992	3 - 242	10744	His-1 to Ala-16, Gly-22 to Cys-29.	H0305: 7		
HCWDV17	974478	993	32 - 697	10745	Ala-144 to Glu-151, Thr-162 to Thr-168.	AR089: 12, AR061: 6 H0305: 4		
HCWDV82	529210	994	1 - 138	10746	Arg-1 to Cys-10, Gly-25 to Ala-35.	H0305: 2		
HCWDW05	852997	995	108 - 212	10747	Ser-1 to Trp-9, Arg-14 to Glu-26.	H0305: 1 and H0589: 1.		
HCWDW08	861936	996	2 - 193	10748		H0305: 4		
HCWDW13	523236	997	114 - 317	10749		H0305: 4		
HCWDW17	849938	998	3 - 224	10750	Leu-57 to Arg-69.	H0305: 2		
HCWDW29	849939	999	26 - 202	10751	Ser-1 to Ser-9.	H0305: 2		
HCWDW33	573554	1000	16 - 141	10752		H0305: 2		
HCWDW42	462405	1001	170 - 370	10753		H0305: 2		
HCWDW43	714423	1002	74 - 229	10754	His-3 to Ala-10.	H0305: 2		
HCWDW57	927656	1003	3 - 167	10755		H0305: 3		
HCWDW61	574859	1004	115 - 273	10756	Leu-2 to Gln-7, Pro-36 to Gly-47.	H0305: 6		
HCWDW62	849960	1005	360 - 599	10757		H0305: 7 and H0589: 2.	21q11.1	
HCWDW73	861934	1006	46 - 303	10758		H0305: 3		
HCWDW74	952698	1007	162 - 329	10759	Ser-8 to Gly-13.	H0589: 2 and H0305: 1.		
HCWDW78	773698	1008	1 - 270	10760	Asp-65 to Leu-71.	H0305: 2		
HCWDW90	529233	1009	19 - 165	10761	Lys-18 to Gln-24, Ala-33 to Ser-39.	H0305: 2		
HCWDW93	574155	1010	1 - 150	10762	Thr-7 to Cys-12, Thr-28 to Asp-36, Phe-39 to Asn-48.	H0305: 2		
HCWDW94	753166	1011	489 - 824	10763		H0305: 2, H0589: 1 and		

HCWDW96	975401	1012	1 - 66	10764	Met-2 to Asn-12.	H0543: 1.		
HCWDX19	523233	1013	264 - 461	10765		H0306: 4 and H0305: 3.		
HCWDX22	967361	1014	69 - 242	10766	Val-19 to Pro-25, Thr-31 to Leu-44.	H0305: 3 and H0589: 1. H0305: 3 and H0589: 1.		
HCWDX36	861932	1015	69 - 323	10767	Pro-5 to His-12, Arg-52 to His-57, His-64 to Asp-69.	H0305: 2, L0749: 2 and H0589: 1.		
HCWDX39	573574	1016	48 - 239	10768	Asn-1 to Gly-19, His-21 to Thr-26.	H0305: 2		
HCWDX52	661568	1017	346 - 549	10769	Lys-1 to Ile-7, Gly-33 to Tyr-44.	H0305: 3 and H0589: 1.		
HCWDX65	920877	1018	1 - 213	10770	Gly-1 to Gly-9, Arg-53 to Asn-60.	H0305: 6		
HCWDX76	932614	1019	2 - 238	10771	Ala-1 to Asp-6, Ala-8 to Gly-14.	H0305: 3		
HCWDX85	861933	1020	106 - 342	10772		H0305: 2 and H0591: 1.		
HCWDY47	573557	1021	70 - 273	10773		H0305: 3		
HCWDZ13	657398	1022	3 - 248	10774		H0305: 6		
HCWDZ89	576697	1023	33 - 164	10775		H0305: 2 and H0589: 1.		
HCWEA30	681277	1024	2 - 187	10776	Lys-14 to Gln-19, Phe-28 to Trp-38, His-41 to Asp-56.	H0305: 1 and H0589: 1.		
HCWEA65	849918	1025	87 - 218	10777		H0305: 2		
HCWEA77	666180	1026	6 - 314	10778	Thr-1 to Leu-8, Arg-25 to Arg-33.	H0305: 1, H0589: 1 and H0318: 1.		
HCWEA78	697596	1027	3 - 308	10779	Asp-29 to Trp-35, Lys-37 to Thr-48, Asp-93 to Pro-99.	H0589: 3 and H0305: 1.		
HCWEA82	719028	1028	68 - 214	10780		H0305: 2		
HCWEA84	506718	1029	2 - 223	10781	Val-16 to Ile-24, Lys-40 to His-47.	H0305: 2		
HCWEA86	574858	1030	87 - 179	10782		H0305: 2		
HCWEB11	975408	1031	2 - 79	10783	Glu-1 to Lys-7.	H0305: 6, H0306: 1 and H0402: 1.		
HCWEB25	925102	1032	2 - 226	10784	Arg-22 to Trp-28.	H0305: 3, S0218: 1 and		



HCWEB28	932114	1033	129 - 353	10785	Gly-41 to Glu-47.	H0264: 1.		
HCWEB33	925286	1034	144 - 362	10786		H0305: 6		
HCWEB37	849854	1035	29 - 256	10787		H0305: 5		
HCWEB40	514584	1036	210 - 1	10788	Leu-7 to Leu-13, Ser-21 to His-27.	H0305: 3		
	711336	9550	23 - 238	19302	Gln-14 to His-20, Thr-27 to Asp-43.	H0305: 3		
HCWEB56	527051	1037	169 - 390	10789		H0305: 3 and H0589: 3.		
HCWEB71	573147	1038	145 - 342	10790	Leu-8 to Gly-20, Asp-28 to Tyr-33.	H0305: 3		
HCWED11	948689	1039	42 - 221	10791	Thr-35 to Thr-47.	H0305: 2, H0589: 1 and L0752: 1.		
HCWED13	573413	1040	232 - 360	10792		H0305: 5		
HCWED61	971865	1041	2 - 289	10793		H0305: 1, L0363: 1, H0187: 1, H0576: 1 and L0748: 1.		
HCWEE02	920544	1042	2 - 202	10794		H0305: 2		
HCWEE03	924743	1043	72 - 404	10795		H0305: 3 and L0779: 1.		
HCWEE07	953731	1044	149 - 304	10796	Gly-6 to Gly-12.	H0305: 3		
HCWEE22	572960	1045	2 - 352	10797	Pro-37 to Gly-48.	H0305: 3		
HCWEE74	738264	1046	2 - 319	10798	Ala-9 to Pro-17.	H0305: 2		
HCWEE76	770169	1047	121 - 291	10799	Gln-3 to Cys-14.	H0305: 3		
HCWEE83	781302	1048	3 - 227	10800	Ala-1 to Asp-13.	H0305: 2		
HCWEEF56	573570	1049	3 - 461	10801	Pro-42 to Asp-48.	H0305: 4		
HCWEEF91	849919	1050	21 - 293	10802	Pro-1 to Arg-8, Arg-18 to Ser-42.	H0305: 3		
HCWEEF92	573568	1051	78 - 362	10803	Phe-8 to Gln-13.	H0305: 3		
HCWEEF95	526766	1052	1 - 297	10804		H0305: 5		
HCWEG09	523251	1053	2 - 292	10805	Thr-12 to Thr-17.	H0305: 3		
HCWEG23	531421	1054	112 - 354	10806	Asp-18 to Gln-24, Pro-42 to Asp-49, Pro-76 to Tyr-81.	H0305: 3		
HCWEG31	693687	1055	2 - 247	10807	Ser-13 to Val-18, Pro-43 to Trp-49.	H0305: 2		
HCWEG47	574191	1056	84 - 215	10808	Gly-34 to Leu-40.	H0305: 2		

HCWEG51	964642	1057	69 - 203	10809	Glu-3 to Ile-19, Ser-33 to Glu-42.	H0305: 5		
HCWEG69	948693	1058	3 - 248	10810		H0305: 3		
HCWEG70	881254	1059	177 - 443	10811		H0305: 2		
HCWEG86	572980	1060	36 - 371	10812	Gln-43 to Cys-52, Pro-76 to Arg-81, Ser-87 to Ala-94, Arg-96 to Arg-112.	H0305: 1 and H0589: 1.		
HCWEH27	527050	1061	65 - 403	10813	Leu-1 to Asn-6, His-48 to Ser-59, Cys-76 to Gly-83.	H0305: 6		
HCWEH53	967056	1062	66 - 320	10814		H0305: 3 and H0589: 1.		
HCWEH76	574187	1063	171 - 332	10815	Thr-9 to Thr-15, Ser-32 to Leu-46.	H0305: 2		
HCWEH93	933146	1064	3 - 326	10816	His-1 to Thr-12.	H0305: 3		
HCWEH94	667919	1065	757 - 284	10817		H0305: 3 and H0255: 1.		
HCWEI19	948690	1066	178 - 309	10818		AR089: 4, AR061: 2		
HCWEI30	666625	1067	67 - 273	10819	Val-11 to Leu-18.	H0305: 2		
HCWEI43	573508	1068	101 - 244	10820	Trp-8 to Thr-14, Phe-20 to Pro-26.	H0305: 2		
HCWEI45	576852	1069	1 - 99	10821		H0305: 2 and H0423: 1.		
HCWEI78	861918	1070	1 - 267	10822		H0305: 1 and H0589: 1.		
HCWEI80	573534	1071	11 - 220	10823		H0305: 2		
HCWEI83	529351	1072	1 - 273	10824	Pro-22 to Ser-27, Pro-30 to Thr-36, Arg-43 to Glu-55, Pro-57 to Cys-63, Pro-76 to Ala-86.	H0305: 2 and H0589: 1.		
HCWEI91	529650	1073	3 - 323	10825	Thr-28 to Ala-40, Lys-91 to Gln-99.	H0305: 3		
HCWEJ02	920488	1074	155 - 463	10826	Ser-1 to Met-15, His-17 to Arg-38.	H0305: 2 and H0589: 1.		
HCWEJ08	959734	1075	202 - 438	10827	Pro-18 to Ala-26.	H0305: 5 and H0589: 2.		
HCWEJ22	954137	1076	1 - 297	10828		H0305: 4 and H0589: 1.		
HCWEJ26	576717	1077	131 - 379	10829	Pro-41 to Pro-46.	H0305: 2, L0764: 2, L0590:		

HCWEJ43	573526	1078	76 - 333	10830	Thr-2 to Arg-9.	2, H0650: 1 and H0486: 1.	
HCWEJ69	757674	1079	11 - 214	10831		H0305: 3	
HCWEJ91	572857	1080	94 - 228	10832		S0114: 1, H0305: 1, L0761: 1 and L0662: 1.	
HCWEK59	855734	1081	1 - 231	10833		H0305: 3	
HCWEK74	573134	1082	188 - 484	10834	Ser-33 to Leu-40.	H0305: 2	
HCWEK80	574157	1083	1 - 324	10835	Asp-25 to Gly-32, Ser-40 to His-45, Leu-51 to Gly-56.	H0305: 3	
HCWEK84	572843	1084	123 - 254	10836	Pro-6 to Cys-19, Glu-26 to Gln-34.	H0305: 3	
HCWEK89	861914	1085	37 - 258	10837	Lys-1 to Ser-8.	H0305: 2	
HCWEL01	916972	1086	1 - 249	10838	Asp-1 to Leu-12, Asn-34 to Ser-39, Pro-77 to Arg-82.	H0305: 2	
HCWEL08	881309	1087	1 - 153	10839	Ala-18 to Arg-23, Tyr-40 to Gly-45.	H0305: 2	
HCWEL18	827387	1088	1 - 279	10840	Asp-45 to Arg-52.	H0305: 7	
HCWEL27	572846	1089	67 - 192	10841		H0305: 2	
HCWEL47	523304	1090	126 - 296	10842		H0305: 5 and H0589: 2.	
HCWEL52	577417	1091	23 - 463	10843	Thr-7 to Val-15, Lys-56 to Leu-63, Ser-70 to Gly-77.	H0305: 1 and H0271: 1.	
HCWEL55	572951	1092	155 - 295	10844		H0305: 2	
HCWEL96	529223	1093	1 - 192	10845		H0305: 3	
HCWEM10	968044	1094	131 - 232	10846	Asp-1 to Trp-9, Val-11 to Lys-21.	S0218: 1 and H0305: 1.	
HCWEM37	573151	1095	3 - 248	10847		H0305: 2 and H0589: 1.	
HCWEM51	920887	1096	3 - 392	10848	Gln-73 to Glu-82.	H0305: 3 and H0589: 1.	
HCWEN20	529237	1097	1 - 342	10849	Gly-71 to Leu-76.	H0305: 4	
HCWEN86	573527	1098	1 - 324	10850		H0305: 3	
HCWEP18	913670	1099	304 - 414	10851	Lys-23 to Leu-32.	H0305: 7 and H0589: 1.	
HCWEP34	523238	1100	107 - 448	10852	Lys-38 to Met-43.	H0305: 6	
HCWEP39	660232	1101	3 - 473	10853	His-1 to Leu-8.	H0305: 5	

HCWEP40	506759	1102	34 - 291	10854	Glu-1 to Lys-6.	H0305: 2	
HCWEP43	921346	1103	48 - 239	10855	Arg-29 to Cys-39.	H0305: 4	
HCWEQ01	861910	1104	110 - 208	10856		H0305: 3	
HCWEQ14	908245	1105	1 - 177	10857	Leu-43 to Tyr-48.	AR089: 39, AR061: 8	
HCWEQ15	660520	1106	74 - 298	10858		H0305: 3	
HCWEQ27	849860	1107	120 - 404	10859	Gly-25 to Glu-34, Lys-55 to Gln-62, Ser-64 to Asn-71, Asn-74 to Pro-79.	H0305: 2	
HCWEQ37	849985	1108	1 - 180	10860		H0305: 2 and H0589: 1.	
HCWEQ89	529240	1109	169 - 324	10861	Thr-13 to Trp-19, Thr-29 to Arg-35.	H0305: 3	
HCWER22	674807	1110	26 - 103	10862	Val-3 to Glu-10.	H0305: 2	
HCWER37	849916	1111	1 - 381	10863	Asp-6 to Gly-11.	H0305: 3	
HCWER61	574921	1112	1 - 102	10864		H0305: 2	
HCWER81	574167	1113	268 - 378	10865	Phe-3 to Asn-9.	H0305: 2	
HCWES03	921933	1114	198 - 380	10866	His-1 to Ala-6.	H0305: 2 and S0052: 1.	
HCWES06	935862	1115	41 - 148	10867	Arg-7 to Thr-17, Pro-29 to Glu-35.	H0305: 1 and H0589: 1.	
HCWEW45	571355	1116	1 - 207	10868	Arg-1 to Gly-6, Glu-18 to Arg-51.	H0305: 2 and H0486: 1.	
HCWEW76	861966	1117	202 - 372	10869		H0305: 4 and L0517: 1.	
HCWEW77	664922	1118	213 - 419	10870	Ile-1 to Ser-6, Asp-11 to Thr-19.	H0305: 4	
HCWEX05	928121	1119	64 - 339	10871	Cys-11 to Ala-17.	H0305: 2	
HCWEX40	574940	1120	85 - 246	10872	Gln-26 to Lys-37, Glu-43 to Ser-52.	H0305: 2	
HCWEX59	709560	1121	83 - 349	10873	Tyr-11 to Phe-17.	H0305: 8 and H0589: 1.	
HCWEX66	731772	1122	163 - 294	10874	Glu-12 to Ser-19.	H0305: 2	
HCWEY07	953701	1123	2 - 424	10875	Ala-1 to Ser-8, Arg-52 to Asn-58.	H0305: 5	
HCWEY33	702597	1124	76 - 432	10876		H0305: 2	
HCWEY34	954142	1125	1 - 246	10877	Pro-2 to Gly-12.	H0305: 3	
HCWEY84	952692	1126	72 - 296	10878	Cys-25 to Val-31,	H0305: 2 and H0589: 1.	

HCWEY88	785508	1127	24 - 308	10879	Lys-37 to Arg-42.	H0305: 2	
HCWFA14	925301	1128	42 - 311	10880	Val-20 to Glu-25. Ser-58 to His-63, Leu-65 to Cys-75.	H0305: 13 and H0589: 2.	
HCWFA65	573193	1129	95 - 250	10881		H0305: 2	
HCWFA88	578943	1130	87 - 281	10882		H0305: 2	
HCWFA89	574370	1131	12 - 248	10883		S0053: 2 and H0305: 1.	
HCWFC05	932194	1132	1 - 198	10884	Gly-1 to Pro-7.	H0305: 2	
HCWFC17	573186	1133	183 - 380	10885	Gly-9 to Glu-14, Gln-16 to Glu-22, Leu-27 to Ser-40.	H0305: 2	
HCWFC65	883787	1134	3 - 287	10886	His-1 to Gly-9.	H0305: 3	
HCWFD07	953700	1135	295 - 534	10887	Gly-59 to Gln-65.	H0305: 2 and H0589: 1.	
HCWFD19	574915	1136	1 - 279	10888	Pro-24 to Cys-29.	H0305: 2	
HCWFD29	573381	1137	1 - 222	10889		H0305: 2	
HCWFD47	671946	1138	123 - 296	10890		H0305: 3 and L0666: 1.	
HCWFD64	954575	1139	1 - 111	10891	Ala-1 to Arg-8.	H0305: 4 and L0748: 1.	
HCWFE06	935856	1140	209 - 391	10892	Lys-20 to Ile-25.	H0305: 2	
HCWFE18	573445	1141	2 - 112	10893	Thr-16 to Lys-31.	H0305: 2	
HCWFF41	849978	1142	3 - 149	10894	Glu-2 to Gly-24.	H0305: 2	
HCWFF88	506577	1143	41 - 187	10895	Pro-1 to Gly-6, Ala-41 to Leu-47.	AR089: 15, AR061: 6 H0305: 2	
HCWFJ65	578936	1144	1 - 126	10896	Leu-13 to Arg-24.	H0305: 2	
HCWFJ72	856908	1145	267 - 482	10897		H0255: 1, H0305: 1, H0589: 1, H0635: 1 and L0384: 1.	
HCWFK16	849988	1146	3 - 161	10898	Val-2 to Thr-7.	H0305: 2	
HCWFK20	575696	1147	14 - 238	10899		H0305: 2	
HCWFK35	916795	1148	3 - 260	10900	Val-3 to Arg-10.	H0305: 7, H0255: 1 and L0766: 1.	
HCWFK57	861907	1149	13 - 276	10901	Thr-72 to Asn-80.	AR089: 1, AR061: 1 H0305: 3 and H0589: 1.	
HCWFK73	761655	1150	2 - 184	10902	Pro-50 to Lys-56.	H0305: 2	
HCWFK91	954008	1151	2 - 157	10903	Glu-35 to Thr-47.	H0305: 3	
HCWFL10	964853	1152	2 - 331	10904	Pro-1 to Gly-7, Arg-48 to Ala-55.	H0305: 2	

HCWFL31	953579	1153	3 - 179	10905	Ser-66 to Asp-87.	H0305: 3 and L0518: 1.	
HCWFL45	577950	1154	200 - 415	10906		H0305: 3	
HCWFL78	529218	1155	3 - 170	10907	Lys-1 to Ala-9.	H0305: 6	
HCWFL86	523359	1156	125 - 295	10908	His-25 to Cys-33.	H0305: 6	
HCWFL94	575522	1157	75 - 230	10909		H0305: 3, L0740: 2 and L0596: 1.	
HCWFM01	916803	1158	106 - 231	10910		H0305: 1 and H0589: 1.	
HCWFM11	959457	1159	26 - 379	10911		H0305: 2	
HCWFM16	678627	1160	80 - 379	10912	Asp-18 to Thr-25.	H0305: 2 and L0750: 1.	250100, 250800, 250800
HCWFM26	677348	1161	2 - 313	10913	Tyr-27 to Leu-33.	H0305: 3	
HCWFM43	715387	1162	3 - 101	10914	Pro-17 to Ile-23.	H0305: 2	
HCWFM59	757660	1163	85 - 219	10915		H0305: 3	
HCWFM60	740470	1164	244 - 390	10916		H0305: 2	
HCWFM65	849957	1165	93 - 233	10917	Ala-1 to Lys-7.	H0305: 6 and H0589: 1.	
HCWFM77	706488	1166	1 - 165	10918		H0305: 1, H0589: 1 and S0426: 1.	
HCWFN14	680404	1167	70 - 288	10919	Gly-50 to Lys-62.	H0305: 3	
HCWFN22	674750	1168	3 - 155	10920	Val-9 to Ser-14.	H0305: 3 and H0589: 1.	
HCWFN37	576547	1169	96 - 206	10921		H0305: 2	
HCWFO01	916814	1170	135 - 371	10922		H0305: 3 and H0589: 1.	
HCWFO02	920416	1171	2 - 175	10923	Asn-53 to Arg-58.	H0305: 2	
HCWFO20	577709	1172	93 - 269	10924		H0305: 3	
HCWFO24	664581	1173	45 - 272	10925		H0305: 3 and H0589: 1.	
HCWFO30	692814	1174	70 - 231	10926	Gly-34 to His-45.	H0305: 2	
HCWFO40	913855	1175	102 - 419	10927	Lys-37 to Trp-46, Arg-68 to Trp-73.	H0305: 3	
HCWFO51	725756	1176	2 - 85	10928	Lys-8 to Met-20.	H0305: 1 and H0589: 1.	
HCWFP21	531288	1177	195 - 437	10929	Gly-23 to Gly-30, Lys-32 to Leu-42.	H0305: 6	
HCWFP27	927700	1178	2 - 232	10930		H0305: 7	
HCWFP47	849893	1179	1 - 411	10931	Ser-47 to Ser-78.	AR089: 2, AR061: 0 H0305: 3	
HCWFP71	933211	1180	169 - 354	10932		H0305: 5 and H0589: 1.	

HCWFP81	576363	1181	124 - 318	10933	Lys-4 to Met-12, Ser-17 to Ser-24, Arg-37 to Lys-43.	H0305: 2		
HCWFR11	967266	1182	2 - 121	10934		H0305: 2		
HCWFR83	721373	1183	100 - 258	10935	Thr-12 to Thr-20.	H0305: 1 and H0589: 1.		
HCWFS22	971566	1184	68 - 379	10936	Arg-19 to Arg-28, Pro-41 to Ser-47.	H0305: 3 and L0794: 1.		
HCWFS65	572953	1185	3 - 245	10937	His-1 to Gln-8, Arg-10 to Glu-15, Arg-21 to Ala-27, Ala-67 to Asp-72.	H0305: 3		
HCWFT29	690751	1186	48 - 236	10938	Ser-18 to Thr-23, Gly-35 to Glu-45.	H0305: 2		
HCWFT33	959471	1187	118 - 2	10939	Ser-12 to Thr-21.	H0305: 7		
HCWFT44	935855	1188	1 - 318	10940	Leu-9 to Asp-14.	H0305: 6		
HCWFT77	739571	1189	15 - 218	10941		H0305: 2		
HCWFT84	542236	1190	199 - 408	10942	Ser-21 to Ser-32.	H0305: 6		
HCWFT03	921944	1191	143 - 319	10943	Thr-24 to Ser-30, Lys-54 to Lys-59.	H0305: 2, L0542: 1, L0779: 1, L0758: 1 and L0600: 1.		
HCWFT07	861902	1192	1 - 84	10944	Ser-18 to Ser-27.	H0305: 2		
HCWFT19	577315	1193	1 - 333	10945		H0305: 2		
HCWFT32	716340	1194	79 - 258	10946	Lys-49 to Thr-60.	H0305: 3 and H0589: 2.		
HCWFT64	577888	1195	3 - 206	10947		H0305: 3, L0368: 1 and L0779: 1.		
HCWFT66	853005	1196	3 - 311	10948		AR061: 1, AR089: 1 H0305: 1 and H0589: 1.		
HCWFT76	576839	1197	177 - 293	10949	Gly-14 to Ala-19, Leu-22 to Tyr-39.	H0305: 2		
HCWFT83	574864	1198	95 - 310	10950	Asp-1 to Pro-12, Pro-25 to Ala-35.	H0305: 4 and H0402: 1.		
HCWFTV16	849953	1199	158 - 367	10951	Ser-34 to Gly-44, Pro-55 to Arg-62.	H0305: 2 and H0589: 1.		
HCWFTV21	849905	1200	136 - 312	10952	Ser-47 to Lys-54.	H0305: 4		
HCWFTV25	733993	1201	3 - 233	10953	Leu-48 to Arg-54.	H0305: 5, H0589: 3, L0748: 3, H0402: 1, L0518: 1, L0809: 1 and H0445: 1.		

HCWFFV32	960099	1202	64 - 153	10954	Arg-1 to Glu-9, Ala-21 to Pro-30.	H0305: 3		
HCWFFV34	577896	1203	2 - 301	10955		H0305: 2 and H0589: 1.		
HCWFFV37	575715	1204	3 - 167	10956	Val-8 to Arg-15, Ile-36 to Glu-42.	H0305: 3 and H0589: 1.		
HCWFFV50	723666	1205	39 - 446	10957	Gly-1 to Pro-7.	H0305: 3 and H0589: 1.		
HCWFFV69	527087	1206	80 - 208	10958	Asn-22 to Ser-28.	H0305: 4 and H0589: 2.		
HCWFFV51	671807	1207	211 - 507	10959	Lys-4 to Glu-10, Ala-30 to Glu-36.	H0305: 2, H0063: 1 and L0635: 1.		
HCWFFX23	675902	1208	3 - 191	10960		H0305: 2		
HCWFFX30	825920	1209	199 - 336	10961	Ile-13 to Asn-18.	H0305: 2		
HCWFFX44	703028	1210	34 - 450	10962	Thr-27 to Leu-43.	H0305: 2 and L0748: 1.		
HCWFFZ30	692719	1211	97 - 252	10963		H0305: 2 and H0589: 1.		
HCWFFZ56	733414	1212	92 - 307	10964	Ser-9 to Tyr-18.	H0305: 1 and S0053: 1.		
HCWGA27	861968	1213	200 - 337	10965		H0305: 3 and H0589: 1.	14q32	123270, 245200, 251600, 270100, 276900
HCWGA32	699272	1214	94 - 285	10966	Ser-16 to Asp-28, Ser-48 to Ser-53.	H0305: 2		
HCWGB61	733105	1215	3 - 230	10967	Phe-1 to His-7, Pro-52 to Ser-57.	H0305: 1 and H0589: 1.		
HCWGB64	578734	1216	56 - 166	10968	Ile-12 to Ser-18.	H0305: 3		
HCWGB78	861843	1217	111 - 392	10969	Cys-23 to Phe-33.	AR089: 2, AR061: 1 H0305: 2 and H0589: 1.		
HCWGC02	917348	1218	75 - 257	10970	Lys-7 to Ser-12.	H0305: 2 and H0589: 1.		
HCWGC50	772358	1219	147 - 392	10971	His-36 to Tyr-45, Thr-52 to Pro-64, Pro-66 to Glu-74.	H0305: 3		
HCWGD20	906973	1220	191 - 379	10972	Ser-1 to Asp-11, Leu-13 to Gly-25.	H0305: 3		
HCWGD33	849909	1221	57 - 209	10973		H0305: 2		
HCWGD66	496411	1222	49 - 189	10974		H0305: 2		
HCWGE12	967067	1223	211 - 300	10975		AR061: 1, AR089: 0 H0305: 3		
HCWGE22	727967	1224	72 - 239	10976		H0305: 2		



HCWGE23	853004	1225	229 - 441	10977			H0305: 4 and H0589: 1.		
HCWGE25	657236	1226	3 - 377	10978		Glu-22 to Glu-28, Leu-107 to Met-116.	H0305: 4 and H0589: 2.		
HCWGE39	705403	1227	2 - 61	10979		Ala-1 to Thr-6.	H0305: 2, L0666: 1 and L0749: 1.		
HCWGE47	925105	1228	231 - 359	10980			H0305: 2 and H0589: 2.		
HCWGE53	728249	1229	3 - 188	10981		His-1 to Trp-14.	H0305: 2		
HCWGE65	720349	1230	173 - 361	10982		Lys-41 to Pro-47.	H0305: 4		
HCWGE73	757333	1231	3 - 212	10983			H0305: 2		
HCWGE78	527557	1232	199 - 339	10984		Gln-2 to Gly-12.	H0305: 2		
HCWGE92	792722	1233	32 - 286	10985		Arg-9 to Ser-15, Thr-40 to Lys-47, Gly-58 to Asn-71, Gly-75 to Glu-85.	H0305: 2	15q22	102578, 109700, 151670, 154550, 601780
HCWGF06	935492	1234	28 - 282	10986		Arg-35 to Asn-47.	H0305: 4		
HCWGF71	960089	1235	208 - 402	10987		Gly-10 to Glu-34.	H0305: 5 and H0589: 1.		
HCWGF74	529235	1236	3 - 245	10988		Pro-1 to Arg-14, Leu-34 to Arg-40.	H0305: 2		
HCWGF75	682351	1237	173 - 313	10989		Glu-27 to Gln-32.	H0305: 2 and H0589: 1.		
HCWGF76	752789	1238	3 - 296	10990		Ser-26 to Arg-36, Leu-41 to Lys-49, Asn-54 to Lys-72.	H0305: 1 and H0589: 1.		
HCWGF91	754244	1239	43 - 153	10991			H0305: 2		
HCWGF92	861865	1240	94 - 306	10992		Lys-1 to Lys-7, Ser-20 to Ser-27.	H0305: 4 and H0445: 1.		
HCWGG07	849889	1241	152 - 376	10993		Ser-53 to Ser-58.	H0305: 1 and H0589: 1.		
HCWGG39	849891	1242	407 - 538	10994		Asp-1 to Phe-9, Phe-13 to Ile-18.	H0305: 3 and H0589: 3.		
HCWGG62	916454	1243	18 - 362	10995		Lys-9 to Cys-17.	H0305: 3 and H0589: 1.		
HCWGG71	710828	1244	1 - 306	10996		Gly-1 to Gly-11.	H0305: 1 and H0589: 1.		
HCWGG80	529242	1245	92 - 259	10997		Lys-8 to Thr-16.	H0305: 3 and H0589: 2.		
HCWGG84	853106	1246	192 - 401	10998		Pro-36 to Arg-43.	H0305: 2		
HCWGR34	923577	1247	52 - 132	10999		Pro-22 to Ser-27.	H0305: 1 and H0589: 1.		
HCWGR43	734888	1248	183 - 314	11000			H0305: 3 and L0529: 1.		
HCWGR47	719518	1249	59 - 196	11001		Met-3 to Ser-13,	H0305: 2		

HCWGR48	690954	1250	83 - 181	11002	Asn-20 to Glu-36.	H0305: 2		
HCWGR69	849946	1251	28 - 366	11003	Gly-7 to Trp-13.	H0305: 3 and H0589: 2.		
HCWGR76	778293	1252	98 - 268	11004		H0305: 1 and H0264: 1.		
HCWGR88	736056	1253	21 - 182	11005		H0305: 3		
HCWGT45	913730	1254	378 - 551	11006	Ala-1 to Gln-14, His-35 to Asp-45.	L0748: 2, H0402: 1, H0305: 1, H0589: 1, L0040: 1 and L0519: 1.		
HCWGT49	527085	1255	19 - 207	11007		H0305: 3		
HCWGT66	531374	1256	45 - 311	11008	Arg-27 to Cys-32, Val-61 to Gly-66.	H0305: 3 and H0589: 1.		
HCWGU11	967064	1257	87 - 233	11009	Ala-8 to Cys-13, Asn-35 to Asp-49.	H0305: 2, L0761: 1 and L0779: 1.		
HCWGU49	674752	1258	61 - 240	11010	Gln-3 to Lys-11.	H0305: 4, H0589: 1, L0764: 1 and L0527: 1.		
HCWGU57	705637	1259	31 - 129	11011	Glu-15 to Arg-22, Glu-27 to Arg-32.	H0305: 2		
HCWGU86	666943	1260	126 - 287	11012	Asp-1 to Trp-15, Ser-23 to Phe-28.	H0305: 3		
HCWGW10	935865	1261	88 - 396	11013	Thr-48 to Gln-55.	H0305: 4 and H0589: 3.		
HCWGW12	964088	1262	262 - 387	11014	Ala-1 to Leu-7.	H0305: 4 and H0589: 1.		
HCWGW13	849911	1263	95 - 409	11015	Pro-58 to Leu-63.	H0305: 3		
HCWGW32	615553	1264	2 - 253	11016	Lys-31 to Asp-37.	H0305: 2 and S0053: 1.		
HCWGW63	745091	1265	1 - 69	11017	Ile-2 to Glu-9.	H0305: 2		
HCWGW80	742103	1266	1 - 165	11018	Leu-42 to Lys-47.	H0305: 2 and L0750: 1.		
HCWGW85	556369	1267	2 - 193	11019		H0305: 7 and H0589: 1.		
HCWGW86	785506	1268	13 - 162	11020	Leu-7 to Gly-12, Glu-35 to Ser-46.	H0305: 2		
HCWGW95	958780	1269	2 - 292	11021		H0305: 1 and H0589: 1.		
HCWGX05	902512	1270	733 - 1089	11022	Pro-41 to Ala-49, Ser-58 to Ile-64, Ser-85 to Trp-91, Leu-105 to Lys-119.	AR050: 57, AR054: 55, AR051: 47 H0305: 4, H0589: 1, H0063: 1 and H0521: 1.		
	972300	9551	1691 - 2062	19303	Pro-18 to Gln-23, Phe-25 to Ser-34, Asn-58 to Asn-67,			

						Gln-74 to Gln-79, Arg-99 to Arg-114, Gly-118 to Phe-124.			
HCWGX23	720486	1271	2 - 235	11023		Ala-1 to Ala-16.	H0305: 2		
HCWGX41	849887	1272	2 - 184	11024		Lys-29 to Gly-35.	H0305: 3		
HCWGX58	920693	1273	2 - 241	11025		Thr-40 to Leu-48, Val-75 to Gln-80.	H0305: 6, S0114: 1, L0142: 1, L0520: 1 and L0599: 1.		
HCWGX68	733413	1274	40 - 129	11026			H0305: 2 and H0589: 1.		
HCWGX82	924102	1275	109 - 237	11027			H0305: 5 and H0589: 2.		
HCWGX94	793197	1276	32 - 184	11028			H0305: 2		
HCWGY02	920113	1277	2 - 361	11029			H0305: 4		
HCWGY03	924208	1278	260 - 87	11030		Lys-1 to Ala-12.	H0305: 5		
HCWGY12	970693	1279	1 - 258	11031			H0305: 3		
HCWGY20	669717	1280	155 - 310	11032			H0305: 2		
HCWGY33	702441	1281	1 - 213	11033		Gly-1 to Pro-10, Asn-46 to Pro-55.	H0305: 3 and S0052: 1.		
HCWGY43	660568	1282	138 - 242	11034			H0305: 2 and L0753: 1.		
HCWGY64	670896	1283	2 - 208	11035		Lys-11 to Arg-17, Ser-32 to Lys-37, Thr-48 to Gln-58.	H0305: 2		
HCWGY67	861886	1284	1 - 312	11036		Leu-14 to Leu-23.	H0305: 2		
HCWGY76	496402	1285	145 - 291	11037		Tyr-43 to His-49.	H0305: 2		
HCWGY85	917132	1286	2 - 352	11038		Ser-30 to Arg-43.	H0305: 2		
HCWGY86	711312	1287	276 - 473	11039			H0305: 2		
HCWGY90	960159	1288	3 - 203	11040			AR089: 12, AR061: 3 H0305: 5		
HCWHA03	924189	1289	1 - 150	11041		Asp-12 to Gln-20.	H0305: 1 and H0589: 1.		
HCWHA09	968224	1290	2 - 148	11042		Cys-16 to His-25, Thr-33 to Lys-40.	H0305: 3		
HCWHA10	961278	1291	178 - 390	11043		Leu-13 to Glu-26, Arg-53 to Glu-58.	H0305: 3		
HCWHA55	731770	1292	52 - 156	11044		Leu-22 to Leu-29.	H0305: 3		
HCWHA56	733424	1293	63 - 173	11045			H0305: 1, H0589: 1, L0766: 1, L0779: 1 and L0604: 1.		
HCWHA84	733421	1294	41 - 301	11046		Pro-27 to Lys-35,	H0305: 3		

HCWHB12	970688	1295	2 - 286	11047	His-49 to Asp-56, Lys-64 to Glu-71.	H0305: 6	
HCWHB32	966508	1296	58 - 297	11048		H0305: 2 and H0589: 1.	
HCWHB65	711437	1297	1 - 87	11049		H0305: 2	
HCWHB68	573571	1298	119 - 331	11050		H0305: 4 and H0589: 1.	
HCWHC01	849886	1299	67 - 231	11051		H0305: 2	
HCWHC26	950719	1300	61 - 252	11052	Ala-12 to Gly-18, Ser-37 to Gly-48.	H0305: 2	
HCWHC35	706508	1301	222 - 362	11053	Thr-22 to Glu-28.	H0305: 2	
HCWHC37	706509	1302	1 - 312	11054		H0305: 2	
HCWHC50	591202	1303	358 - 543	11055		H0305: 1 and H0589: 1.	
HCWHC59	964852	1304	69 - 161	11056		H0305: 5	
HCWHD07	953384	1305	2 - 337	11057	Lys-7 to Glu-18, Pro-38 to Thr-51.	H0305: 2 and H0589: 1.	
HCWHD17	663865	1306	2 - 172	11058	Lys-10 to Trp-15.	H0305: 3	
HCWHD23	934917	1307	129 - 227	11059		H0589: 2 and H0305: 1.	
HCWHD68	690359	1308	111 - 335	11060		H0305: 3 and H0589: 1.	
HCWHF62	582472	1309	1 - 207	11061	Pro-33 to Arg-43.	L0748: 3, H0305: 2 and H0589: 1.	
HCWHF85	746745	1310	123 - 317	11062		H0305: 2	
HCWHJ15	968379	1311	1 - 105	11063		H0305: 4	
HCWHJ25	686712	1312	172 - 354	11064		H0305: 2	
HCWHJ48	721816	1313	1 - 354	11065	Gly-1 to Thr-8, Pro-19 to Arg-25.	H0305: 2	
HCWHJ53	693313	1314	135 - 425	11066	Phe-11 to Trp-16, Gly-30 to Lys-38, Ser-49 to Ala-57.	H0305: 2 and H0589: 2.	
HCWHJ55	861884	1315	145 - 318	11067	Ser-43 to Leu-58.	H0305: 4	
HCWHJ75	786019	1316	167 - 412	11068	Gly-32 to Gly-39, Trp-54 to Lys-65.	H0305: 2	
HCWHJ91	674157	1317	103 - 345	11069	Gln-28 to Thr-36, Ala-59 to Arg-64.	H0305: 1 and H0589: 1.	
HCWHL11	967057	1318	3 - 299	11070	Ala-1 to Val-13.	H0305: 3	

HCWHL36	465250	1319	309 - 491	11071	Arg-25 to Lys-31.	H0305: 2, L0766: 1 and L0747: 1.		
HCWHL42	959894	1320	30 - 233	11072		H0306: 2 and H0305: 2.		
HCWHL73	960097	1321	3 - 407	11073	Pro-10 to Cys-15, Gly-22 to Gln-27, Lys-54 to Arg-64, Glu-73 to Gly-81, Asp-89 to Ala-96, Trp-98 to Ser-104.	H0305: 6 and L0589: 1.		
HCWHL89	754087	1322	2 - 139	11074		H0305: 2		
HCWHN05	849885	1323	210 - 377	11075		H0305: 2, S0114: 1, H0402: 1 and H0444: 1.		
HCWHN28	529654	1324	70 - 330	11076		H0305: 2		
HCWHO38	573533	1325	169 - 426	11077	Pro-25 to Gly-36.	H0305: 3		
HCWHO45	717807	1326	34 - 288	11078	Gly-1 to Lys-13, Arg-47 to Ser-52, Gln-75 to Phe-85.	H0305: 1, H0589: 1 and S0428: 1.		
HCWHO78	960180	1327	77 - 208	11079	Ser-14 to Trp-26, Phe-39 to Tyr-44.	H0305: 3		
HCWHO93	924109	1328	2 - 169	11080		H0305: 3 and H0589: 1.		
HCWHP06	935483	1329	93 - 302	11081	Ser-25 to Ala-31.	H0305: 3 and H0402: 2.		
HCWHP25	881285	1330	19 - 474	11082		H0305: 6, L0748: 2 and L0528: 1.		
HCWHP40	577691	1331	228 - 395	11083		H0305: 5 and H0589: 1.		
HCWHP44	705392	1332	1 - 96	11084		H0305: 4 and L0749: 1.		
HCWHP70	711476	1333	163 - 303	11085	Pro-13 to Leu-22.	S0114: 1 and H0305: 1.		
HCWHP74	598510	1334	41 - 322	11086	Glu-1 to Glu-7, Phe-12 to Val-17, Gly-42 to Ser-49, Thr-52 to Thr-65.	H0305: 1 and H0589: 1.		
HCWHP84	849900	1335	3 - 164	11087		H0305: 2		
HCWHQ03	924187	1336	1 - 144	11088	Gly-1 to Ser-7, Gly-23 to Asn-28.	H0305: 4		
HCWHQ31	574945	1337	129 - 428	11089		AR089: 1, AR061: 1 H0305: 4		
HCWHQ82	677186	1338	292 - 429	11090		H0305: 2 and L0740: 1.		

HCWHR01	916526	1339	2 - 403	11091	Ser-16 to Ser-29, Leu-42 to Gln-50, Pro-76 to Gln-85.	H0305: 5		
HCWHR09	542336	1340	245 - 388	11092		H0305: 6 and H0589: 1.		
HCWHR59	739293	1341	195 - 572	11093		H0305: 2 and H0589: 1.		
HCWHR77	729850	1342	3 - 341	11094	Arg-1 to Thr-10, Pro-13 to Gly-25.	H0305: 3		
HCWHR81	935419	1343	71 - 277	11095	Val-1 to Gln-8, Thr-18 to Ser-23, Glu-47 to Pro-52.	AR089: 3, AR061: 1 H0305: 6		
HCWHS13	657230	1344	103 - 204	11096	Arg-26 to Pro-33.	H0305: 2		
HCWHS28	675051	1345	38 - 223	11097	Ser-34 to Gly-49.	H0305: 2		
HCWHS77	861875	1346	89 - 349	11098		H0305: 1 and H0589: 1.		
HCWHT50	527542	1347	75 - 305	11099	His-47 to Phe-53, Pro-59 to Ala-64.	H0305: 6		
HCWHT56	849979	1348	42 - 230	11100	Gln-24 to Val-31.	H0305: 3		
HCWHT59	924105	1349	106 - 333	11101		H0305: 3		
HCWHU22	849878	1350	63 - 329	11102		H0305: 3		
HCWHU30	974485	1351	75 - 404	11103	Ser-7 to Arg-14, Ser-16 to Ala-26, Pro-53 to Tyr-60.	H0305: 3		
HCWHU47	720340	1352	130 - 255	11104		H0305: 2		
HCWHU52	726054	1353	39 - 176	11105		H0305: 3		
HCWHU54	727314	1354	1 - 123	11106		H0305: 2		
HCWHU58	736052	1355	3 - 302	11107	Ser-3 to Ser-8, Glu-10 to Gln-17, Asp-24 to Asn-36, Pro-55 to Arg-69.	H0305: 2		
HCWHV11	964996	1356	1 - 213	11108		H0305: 2		
HCWHV18	466511	1357	145 - 342	11109		H0305: 3		
HCWHV28	686710	1358	253 - 444	11110	Pro-14 to Gln-20.	H0305: 1, H0589: 1 and L0748: 1.		
HCWHV33	702437	1359	3 - 200	11111		H0305: 1 and H0589: 1.		
HCWHV41	960157	1360	175 - 345	11112	Gln-25 to Gln-33, Thr-41 to Arg-47.	H0305: 3 and H0589: 1.		
HCWHV61	849983	1361	9 - 422	11113	Trp-1 to Arg-13.	H0305: 4		

HCWHV64	770049	1362	2 - 148	11114	Asp-9 to Ala-14.	H0305: 2 and L0745: 1.	
HCWHV66	923527	1363	252 - 479	11115	Pro-3 to Tyr-8.	H0305: 1 and H0589: 1.	
HCWHV71	917274	1364	269 - 502	11116	Gln-12 to Tyr-18, Lys-59 to Glu-68.	H0305: 3	
HCWHV94	953379	1365	169 - 345	11117	Ser-5 to Ser-12.	H0305: 5	
HCWHW32	861905	1366	236 - 559	11118		H0305: 3 and H0589: 1.	
HCWHW38	722213	1367	2 - 232	11119	Arg-53 to Gly-59.	AR051: 12, AR050: 1 H0305: 3	
	861870	9552	210 - 551	19304	Ala-1 to Gln-7, Lys-24 to Cys-34, Arg-90 to Gly-96.		
HCWHW83	841937	1368	26 - 220	11120	Trp-33 to Ser-38.	H0305: 5 and H0589: 1.	
HCWHX08	959456	1369	3 - 209	11121	Arg-45 to Pro-50.	H0305: 1, H0589: 1 and L0369: 1.	
HCWHX09	625596	1370	37 - 303	11122	Gly-1 to Cys-7, Tyr-28 to Ser-43.	H0589: 2 and H0305: 1.	
HCWHX72	849884	1371	2 - 247	11123	Ala-1 to Gly-7, Gly-12 to Gly-19, Pro-21 to Lys-31.	H0305: 3 and L0599: 1.	
HCWHX91	723178	1372	27 - 245	11124	Ala-45 to Arg-61.	H0305: 2	
HCWHX95	736004	1373	4 - 117	11125	Gly-4 to Gln-14, Cys-33 to Lys-38.	H0305: 2	
HCWHZ18	666452	1374	54 - 209	11126	Arg-11 to Phe-16.	H0305: 2, L0805: 1 and L0776: 1.	
HCWHZ51	725682	1375	124 - 315	11127	Ser-1 to Ile-7, Thr-26 to Ser-32, Pro-42 to Trp-48.	H0305: 2	
HCWHZ59	739294	1376	2 - 322	11128		H0305: 2	
HCWHZ83	781186	1377	3 - 92	11129		H0305: 2	
HCWHZ89	668670	1378	3 - 104	11130		H0305: 2	
HCWKA13	494088	1379	580 - 374	11131		H0305: 5	
	971148	9553	89 - 247	19305			
HCWKA21	670897	1380	129 - 266	11132	Gly-30 to Gln-36, Thr-38 to Pro-46.	H0305: 2	
HCWKA28	466763	1381	99 - 272	11133	Glu-1 to Gln-8.	H0305: 2	
HCWKA79	574911	1382	307 - 483	11134		H0305: 3	

HCWKA96	963621	1383	203 - 355	11135	Thr-14 to Val-20, Lys-37 to Asn-48.	H0305: 3, H0589: 1 and L0758: 1.		
HCWKB04	676904	1384	74 - 244	11136	Pro-50 to Ile-55.	L0776: 4, H0305: 2, H0589: 1, L0659: 1, L0438: 1 and L0756: 1.		
HCWKB10	964570	1385	202 - 408	11137	Pro-14 to Ser-30.	H0305: 3 and H0589: 2.		
HCWKC83	496385	1386	1 - 99	11138		H0305: 3		
HCWKD34	706520	1387	231 - 368	11139		H0305: 1 and H0589: 1.		
HCWKF08	959388	1388	1 - 216	11140		H0305: 1 and H0589: 1.		
HCWKF28	686655	1389	155 - 340	11141	Pro-15 to Gly-21, Pro-23 to Cys-28, Leu-40 to Asn-48.	H0305: 2		
HCWKF29	779862	1390	55 - 207	11142		H0305: 2		
HCWKG10	964577	1391	3 - 134	11143		H0305: 1 and H0589: 1.		
HCWKH08	959381	1392	71 - 310	11144	Arg-1 to Asp-9.	H0305: 1 and H0589: 1.		
HCWKH16	661898	1393	290 - 382	11145	Asn-1 to Trp-7.	H0305: 1 and H0589: 1.		
HCWKH25	678086	1394	146 - 307	11146		H0305: 2		
HCWKH36	924191	1395	102 - 206	11147		H0305: 3		
HCWKJ31	678375	1396	1 - 75	11148		H0305: 2		
HCWKJ77	920043	1397	347 - 457	11149		H0305: 2 and H0589: 2.		
HCWKJ92	792689	1398	154 - 480	11150		H0305: 4		
HCWKJ23	934393	1399	323 - 478	11151		H0305: 2 and H0589: 2.		
HCWKJ40	861851	1400	233 - 409	11152	Leu-5 to Glu-12, Ser-34 to Lys-40.	H0305: 2		
HCWKJ60	968112	1401	102 - 365	11153	Gly-7 to Ile-13.	H0305: 6		
HCWKJ96	571302	1402	88 - 249	11154	Cys-16 to Cys-22, Lys-32 to Arg-42.	H0305: 6		
HCWKM28	849915	1403	1 - 357	11155		H0305: 4		
HCWKM31	697974	1404	2 - 169	11156	Ala-6 to Pro-12.	H0305: 2		
HCWKM58	849934	1405	10 - 246	11157		H0305: 4 and H0589: 1.		
HCWKM60	740347	1406	12 - 143	11158		H0305: 2 and S0052: 1.		
HCWKM88	792086	1407	20 - 148	11159	Met-5 to Asn-12.	H0305: 1 and H0589: 1.		
HCWKM90	960177	1408	152 - 310	11160	Leu-9 to Cys-18.	H0305: 5		
HCWKN08	959380	1409	24 - 284	11161	Pro-27 to Asn-34, Asn-48 to Leu-57.	H0305: 2		



HCWKN57	861537	1410	310 - 2	11162	Ser-13 to Pro-36, Thr-79 to Ser-89.	H0305: 3		
HCWKO51	959684	1411	330 - 494	11163	Thr-17 to Thr-27.	H0305: 2 and L0599: 1.		
HCWKO82	827083	1412	2 - 217	11164	Cys-49 to Ala-54.	H0305: 6		
HCWKP03	924104	1413	95 - 331	11165	Glu-9 to Pro-15, Gln-17 to Asp-24, Gly-46 to Lys-67.	H0305: 4		
HCWKP51	725653	1414	1 - 270	11166	Pro-15 to Arg-20.	H0305: 2		
HCWKP53	664923	1415	202 - 309	11167		H0305: 2		
HCWKP56	849861	1416	1 - 342	11168	Glu-1 to Ser-11, Ser-75 to Leu-81, Ser-86 to Thr-91.	H0305: 3 and H0589: 1.		
HCWKP63	732447	1417	79 - 246	11169	Lys-1 to Leu-27, Ser-29 to Lys-44, Arg-50 to His-55.	H0305: 2 and H0589: 1.		
HCWKQ31	849851	1418	108 - 326	11170	Glu-68 to Arg-73.	H0305: 2		
HCWKQ55	706487	1419	116 - 214	11171		H0305: 2 and H0589: 1.		
HCWKR13	917268	1420	323 - 153	11172		H0305: 5		
HCWKR80	527074	1421	30 - 398	11173		H0305: 4 and H0589: 1.		
HCWKS13	657194	1422	26 - 232	11174	Gln-1 to Cys-6.	H0305: 2, L0803: 1 and L0779: 1.		
HCWKT11	966989	1423	44 - 193	11175	Gly-36 to Thr-47.	H0305: 2		
HCWKT43	659539	1424	2 - 244	11176		H0305: 2		
HCWKT57	881629	1425	19 - 267	11177		H0305: 2		
HCWKT63	849944	1426	301 - 429	11178		H0305: 4		
HCWKV68	959801	1427	1 - 243	11179		H0305: 2		
HCWKV77	527554	1428	265 - 402	11180	Ser-9 to Gln-15.	H0305: 2		
HCWKV85	932540	1429	2 - 202	11181	Asp-8 to Cys-15.	H0305: 3		
HCWKX13	466512	1430	173 - 337	11182		S0114: 1 and H0305: 1.		
HCWKX61	676895	1431	18 - 164	11183	Phe-42 to Gly-47.	H0305: 4 and H0589: 2.		
HCWKX68	725014	1432	57 - 203	11184	Pro-33 to Thr-39.	H0305: 2		
HCWKX77	772163	1433	143 - 418	11185		H0589: 2 and H0305: 1.		
HCWKX81	724873	1434	132 - 368	11186		H0305: 3		
HCWLA68	665744	1435	3 - 161	11187	Val-12 to Cys-18, Arg-23 to Gly-29.	H0305: 1 and H0589: 1.		

HCWLD01	916439	1436	2 - 367	11188			L0655: 2, H0305: 1, H0581: 1, T0041: 1 and L0767: 1.		
HCWLD06	935392	1437	2 - 331	11189			H0305: 3 and H0589: 1.		
HCWLD30	933118	1438	264 - 133	11190		Leu-13 to Thr-27.	H0305: 1 and H0022: 1.		
HCWLD83	728219	1439	58 - 318	11191		Val-2 to His-11.	H0305: 2		
HCWLE11	880982	1440	57 - 413	11192		Glu-38 to Gly-46, Phe-79 to Phe-88, Ser-104 to Gly-112.	H0305: 6, H0402: 1 and L0659: 1.		
HCWLE34	576816	1441	218 - 385	11193			H0305: 2		
HCWLE37	960093	1442	20 - 412	11194		Ala-12 to Cys-23, Trp-30 to Gly-38, Pro-41 to Gly-48, Pro-51 to Gly-62, Gly-95 to Ser-105.	H0305: 2		
HCWLE46	719247	1443	76 - 528	11195		Ser-3 to His-8, Tyr-11 to Gly-28.	H0305: 4		
HCWLE57	764189	1444	33 - 227	11196		Glu-43 to Ser-52.	H0305: 2 and H0589: 1.		
HCWLE64	745863	1445	121 - 312	11197		Pro-10 to Arg-17, Gln-40 to Gly-50.	H0305: 2 and H0589: 1.		
HCWLE95	684331	1446	21 - 188	11198			H0305: 2		
HCWLH02	853014	1447	332 - 553	11199		Asp-1 to Pro-9, Ser-35 to Gln-43, His-63 to Gln-68.	H0305: 1 and H0589: 1.		
	919329	9554	279 - 64	19306		Gly-10 to Arg-17.			
HCWLH09	625558	1448	300 - 530	11200			H0305: 2		
HCWLH20	529356	1449	1 - 282	11201			H0305: 3		
HCWLH42	954875	1450	671 - 435	11202			H0305: 4		
HCWLH75	670202	1451	99 - 245	11203		Val-28 to Ala-34.	H0305: 4		
HCWLH78	935908	1452	148 - 366	11204			H0305: 4		
HCWLH79	959458	1453	226 - 447	11205		Pro-14 to His-22, Pro-31 to Gln-39.	H0305: 6		
HCWLH80	577886	1454	10 - 270	11206		Asn-2 to Thr-8, Ser-23 to Gly-35.	H0305: 4		
HCWSB09	923573	1455	99 - 239	11207		Gly-24 to Lys-33.	H0305: 1 and H0589: 1.		
HCWSB30	771897	1456	285 - 500	11208			H0305: 2 and H0589: 1.		
HCWSB65	728360	1457	36 - 182	11209		Gln-9 to Trp-18.	H0305: 2		

HCWTA02	919258	1458	65 - 223	11210		H0589: 2		
HCWTA59	531422	1459	18 - 146	11211	Glu-32 to Gln-38.	H0305: 3 and H0589: 1.		
HCWTB01	861850	1460	188 - 358	11212		S0116: 1, H0305: 1 and H0589: 1.		
HCWTB08	920509	1461	60 - 203	11213		H0305: 1 and H0589: 1.		
HCWTB11	965024	1462	3 - 299	11214	His-7 to Ala-14, Arg-42 to Arg-51, Glu-56 to Asp-61.	H0305: 2 and H0589: 2.		
HCWTB13	861029	1463	168 - 296	11215	Glu-6 to Arg-15.	H0305: 4, H0589: 1 and H0179: 1.		
HCWTB14	657621	1464	2 - 328	11216		H0305: 2 and H0589: 1.		
HCWTB25	677748	1465	3 - 236	11217	Gln-11 to Tyr-23, Arg-37 to Phe-44, Arg-66 to Arg-78.	H0589: 2		
HCWTB31	697615	1466	14 - 436	11218		H0305: 1 and H0589: 1.		
HCWTB33	702129	1467	138 - 350	11219		H0305: 1 and H0589: 1.		
HCWTB36	529499	1468	1 - 210	11220		H0305: 2 and H0589: 1.		
HCWTB38	732440	1469	1 - 309	11221	Pro-1 to Asp-6, Asp-24 to Pro-30.	H0589: 2 and H0305: 1.		
HCWTB56	853009	1470	2 - 346	11222		AR061: 5, AR089: 4 H0305: 2 and H0589: 1.		
HCWTB65	861848	1471	2 - 175	11223	Thr-1 to Asp-8, Arg-28 to Leu-34.	H0305: 1 and H0589: 1.		
HCWTB77	771887	1472	317 - 448	11224		H0589: 2		
HCWTB83	730832	1473	23 - 283	11225	Asp-5 to Thr-20.	H0305: 2 and H0589: 1.		
HCWTF05	849954	1474	1 - 318	11226	Trp-5 to Trp-17, Gly-30 to Lys-36.	H0305: 2 and H0589: 1.		
HCWTF11	966513	1475	346 - 621	11227		H0589: 2, S0114: 1 and H0305: 1.		
HCWTF19	668358	1476	3 - 149	11228	Met-32 to Lys-39.	H0589: 2 and H0305: 1.		
HCWTF72	760898	1477	189 - 362	11229	Asn-16 to Arg-26, Arg-37 to Gly-46.	H0589: 2 and H0305: 1.		
HCWTG01	915863	1478	2 - 175	11230	Thr-21 to Val-26, Lys-28 to Lys-36.	H0589: 3 and H0305: 2.		
HCWTG15	659860	1479	105 - 248	11231	Ser-21 to Thr-27.	H0589: 2		
HCWTG26	681271	1480	348 - 476	11232		H0305: 1 and H0589: 1.		

HCWTG30	954579	1481	84 - 197	11233	Leu-1 to Leu-7.	H0589: 4 and H0305: 3.	
HCWTG44	657911	1482	366 - 572	11234		H0589: 3	
HCWTG45	662482	1483	217 - 384	11235	Lys-34 to Leu-39.	H0589: 3	
HCWTG60	740078	1484	167 - 379	11236	Tyr-8 to Ser-14.	H0305: 1 and H0589: 1.	
HCWTG66	754823	1485	79 - 249	11237	Tyr-19 to Val-24.	H0589: 2	
HCWTG77	924107	1486	185 - 304	11238	Asn-16 to Gly-25.	H0589: 5 and H0305: 4.	
HCWTG81	773341	1487	104 - 334	11239	Pro-61 to His-67.	H0589: 2	
HCWTI25	669935	1488	118 - 345	11240	Gln-56 to Arg-63, Ala-65 to Leu-74.	H0589: 2 and H0305: 1.	
HCWTI33	701757	1489	192 - 323	11241	Ser-27 to Phe-34.	H0305: 1 and H0589: 1.	
HCWTI38	576883	1490	60 - 293	11242	Ser-4 to Glu-15.	H0305: 2 and H0589: 1.	
HCWTI44	689971	1491	82 - 225	11243	Thr-16 to Asn-21, Tyr-32 to Arg-37.	H0589: 2	
HCWTI47	720023	1492	163 - 279	11244		H0589: 2	
HCWTI54	723080	1493	108 - 188	11245		H0305: 1 and H0589: 1.	
HCWTJ01	915878	1494	1 - 336	11246	Ala-17 to Ser-32.	H0305: 1 and H0589: 1.	
HCWTJ50	724072	1495	42 - 257	11247	Ser-1 to Lys-18, Ser-40 to Arg-51.	H0589: 2	
HCWTL24	676906	1496	221 - 325	11248		H0305: 1 and H0589: 1.	
HCWTL25	598511	1497	165 - 329	11249		H0305: 1 and H0589: 1.	
HCWTL51	725482	1498	64 - 267	11250	Trp-4 to Gly-10, His-42 to Cys-50, Ser-53 to Gly-63.	H0589: 2	
HCWTL52	573539	1499	36 - 293	11251	Glu-18 to Leu-27, Gly-35 to Gln-40, Pro-46 to Thr-51, Arg-67 to Ser-76.	H0305: 2 and H0589: 1.	
HCWTL58	697623	1500	111 - 278	11252	Ile-1 to Arg-7, Leu-46 to Gln-51.	H0589: 2	
HCWTL69	960597	1501	188 - 454	11253	Pro-18 to Ser-25, Leu-42 to Arg-53.	H0589: 2	
HCWTL78	760707	1502	160 - 231	11254		H0305: 1 and H0589: 1.	
HCWTL85	836155	1503	1 - 153	11255	Asn-18 to Lys-23.	H0589: 2	
HCWTM16	661569	1504	2 - 391	11256	Thr-1 to Thr-11, Asp-59 to Gln-64,	H0305: 1, H0589: 1, H0581: 1 and L0565: 1.	

HCWTO06	934912	1505	16 - 360	11257	Thr-90 to Thr-101. Cys-20 to His-27, Thr-34 to Ser-63, Arg-72 to Gly-78, Leu-89 to Met-99.	H0589: 2		
HCWTO29	660457	1506	2 - 277	11258	Leu-16 to Leu-24.	H0305: 1 and H0589: 1.		
HCWTO35	706525	1507	159 - 302	11259	Leu-1 to Ser-6, Ser-10 to Leu-17, Pro-43 to Arg-48.	H0589: 2		
HCWTO52	726444	1508	54 - 233	11260		H0305: 1, H0589: 1, L0667: 1 and L0752: 1.		
HCWTO60	681257	1509	2 - 205	11261		H0589: 2		
HCWTP13	656678	1510	78 - 311	11262	Arg-58 to Ser-67.	H0589: 2		
HCWTP22	674158	1511	182 - 370	11263		H0305: 1 and H0589: 1.		
HCWTP76	731438	1512	110 - 328	11264		H0589: 2		
HCWTP77	529346	1513	23 - 343	11265		H0305: 2 and H0589: 1.		
HCWTP90	788663	1514	205 - 393	11266	Ser-8 to Arg-13, Lys-19 to Ser-29.	H0589: 2		
HCWTP91	661551	1515	179 - 394	11267		H0589: 2, L0438: 2 and H0265: 1.	7q31	126650, 126650, 164860, 180105, 222800, 246900, 274600, 274600, 602081
HCWTR08	958791	1516	3 - 191	11268		H0305: 5 and H0589: 2.		
HCWTR54	729290	1517	49 - 240	11269	Ser-37 to Gly-44.	AR089: 6, AR061: 2 H0589: 2		
HCWTR77	659506	1518	1 - 198	11270		H0589: 4 and H0305: 1.		
HCWTS15	654317	1519	2 - 223	11271	Leu-1 to His-8.	AR061: 5, AR089: 1 H0305: 1 and H0589: 1.		
HCWTS84	669926	1520	98 - 292	11272		H0305: 1 and H0589: 1.		
HCWTT20	669430	1521	335 - 436	11273		H0589: 2		
HCWTT45	576720	1522	148 - 315	11274	Leu-10 to Tyr-16, Glu-24 to Ala-31.	H0305: 2 and H0589: 2.		
HCWTT47	706527	1523	188 - 355	11275		H0589: 2		
HCWTT63	542409	1524	1 - 210	11276	Lys-7 to Leu-15, Gly-31 to Arg-36,	H0305: 5 and H0589: 2.		

HCWTT81	712302	1525	110 - 247	11277	Glu-60 to Asp-67. Glu-1 to Lys-9, His-18 to Gly-23, Glu-31 to Lys-36.	H0305: 1 and H0589: 1.		
HCWTT89	786693	1526	224 - 331	11278		H0305: 1 and H0589: 1.		
HCWTU12	934902	1527	102 - 308	11279		H0305: 2 and H0589: 2.		
HCWTU83	780917	1528	13 - 183	11280	Arg-8 to Met-13, Glu-35 to Lys-52.	H0589: 2		
HCWTU84	666642	1529	30 - 167	11281	Ser-1 to Ser-6.	H0305: 2 and H0589: 1.		
HCWTV17	725862	1530	232 - 429	11282		H0305: 1 and H0589: 1.		
HCWTV62	742696	1531	135 - 401	11283		AR051: 9, AR054: 8, AR050: 8 H0305: 3 and H0589: 1.		
HCWTV73	574912	1532	187 - 474	11284	Ser-48 to Pro-55, Ala-62 to Asp-72, Lys-84 to Ile-90.	H0305: 2 and H0589: 1.		
HCWTV88	861846	1533	2 - 322	11285	Gly-38 to Leu-43, Pro-56 to Ile-61, Gln-64 to Pro-73, Thr-86 to Arg-93.	H0305: 1 and H0589: 1.		
HCWUA19	668355	1534	167 - 406	11286	Met-41 to Gly-55.	H0589: 2 and H0305: 1.		
HCWUA23	577964	1535	52 - 276	11287	Ala-18 to Gly-28, Trp-45 to Pro-51.	H0589: 2 and H0305: 1.		
HCWUA43	715000	1536	3 - 164	11288	Gly-16 to Ala-22.	H0589: 2		
HCWUA90	706532	1537	4 - 156	11289	Pro-33 to Asn-40.	H0589: 2		
HCWUB03	923556	1538	38 - 304	11290		H0305: 1 and H0589: 1.		
HCWUB08	958770	1539	5 - 130	11291	Val-9 to Gly-21.	H0589: 2		
HCWUB74	765274	1540	131 - 358	11292		H0305: 2 and H0589: 1.		
HCWUB83	853008	1541	44 - 280	11293	Pro-37 to Lys-48, Lys-57 to Ser-62.	H0305: 3, H0254: 1, H0589: 1, H0445: 1 and H0543: 1.		
HCWUC39	572977	1542	1 - 312	11294	Gly-29 to Ile-37.	H0305: 3 and H0589: 1.		
HCWUC64	588122	1543	156 - 314	11295	Gly-27 to Lys-33.	H0589: 1 and H0542: 1.		
HCWUC94	721663	1544	3 - 500	11296	Gln-12 to Pro-29, Gly-35 to Gln-50, Leu-55 to Thr-61, Asn-70 to Cys-89.	H0305: 1 and H0589: 1.		

HCWUD64	746332	1545	197 - 361	11297	Pro-91 to Gln-96.	H0305: 1 and H0589: 1.		
HCWUD83	827340	1546	215 - 442	11298	Leu-26 to Ser-31.	H0305: 1 and H0589: 1.		
HCWUD85	529221	1547	1 - 126	11299	Phe-8 to Lys-15.	H0305: 2 and H0589: 1.		
HCWUD93	574856	1548	3 - 314	11300	Ser-6 to Gly-24, Ser-38 to Asn-43, Pro-53 to Gly-58, Gly-60 to Gln-68, Gly-79 to Glu-85, Leu-93 to Lys-101.	H0305: 2 and H0589: 1.		
HCWUF05	849929	1549	47 - 226	11301	Tyr-11 to Thr-20, Tyr-27 to Ala-40.	H0305: 1 and H0589: 1.		
HCWUF30	691734	1550	112 - 405	11302	Leu-9 to Ser-15, Asn-41 to Asn-50, Gln-57 to Glu-62, Arg-82 to Arg-97.	H0305: 1 and H0589: 1.		
HCWUF40	703804	1551	25 - 168	11303		H0589: 2		
HCWUF46	656680	1552	2 - 211	11304	Pro-4 to Glu-12, Ser-61 to Trp-70.	H0589: 2		
HCWUF54	933212	1553	54 - 167	11305	Thr-12 to Asp-19.	H0305: 1 and H0589: 1.		
HCWUF84	686711	1554	88 - 174	11306		H0305: 1 and H0589: 1.		
HCWUG43	697616	1555	16 - 261	11307	Glu-28 to Ser-36.	H0589: 2		
HCWUG59	573548	1556	167 - 409	11308	Ala-31 to Cys-36.	H0305: 2, H0589: 1 and H0581: 1.	1q12-1q21.2	104770, 107670, 110700, 145001, 146760, 146790, 159001, 191315, 600897, 601412, 601652, 601863, 602491
HCWUG93	920882	1557	1 - 243	11309	Thr-43 to Glu-50, Ala-52 to Trp-57, Gly-63 to Asn-71.	H0305: 1 and H0589: 1.		
HCWUH17	662478	1558	87 - 293	11310	Pro-18 to Tyr-23, Ala-57 to Leu-65.	H0305: 5, H0589: 3, L0748: 3, H0402: 1, L0518: 1, L0809: 1 and H0445: 1.		
HCWUH25	677747	1559	130 - 333	11311		H0305: 1 and H0589: 1.		

HCWUH85	752790	1560	181 - 282	11312			H0589: 2		
HCWUI10	964028	1561	2 - 166	11313	Lys-15 to Tyr-28, Gln-47 to Leu-52.		H0589: 2		
HCWUI17	662483	1562	7 - 147	11314	Arg-8 to Leu-13, Gly-16 to Trp-28, Lys-41 to Lys-46.		H0589: 2		
HCWUK13	656679	1563	197 - 391	11315	Ala-39 to Phe-47.		H0305: 1 and H0589: 1.		
HCWUK56	733122	1564	166 - 330	11316			H0589: 2		
HCWUK77	771883	1565	26 - 238	11317			H0305: 1 and H0589: 1.		
HCWUK95	615550	1566	2 - 97	11318			H0305: 2 and H0589: 1.		
HCWUL03	923572	1567	81 - 230	11319	Ala-10 to Lys-16, Arg-35 to Ser-42.		H0589: 2		
HCWUL19	668361	1568	69 - 314	11320	Ile-12 to Asp-18.		H0305: 1 and H0589: 1.		
HCWUL24	968380	1569	80 - 196	11321			H0305: 1 and H0589: 1.		
HCWUL32	523358	1570	58 - 315	11322	Arg-6 to Ala-13.		H0305: 5 and H0589: 1.		
HCWUL36	849901	1571	1 - 357	11323	Gln-27 to Gln-32, Lys-37 to Gly-45.		H0305: 2 and H0589: 1.		
HCWUL47	720024	1572	3 - 482	11324	Thr-18 to Pro-23, Pro-91 to Gly-96.		H0305: 1 and H0589: 1.		
HCWUL69	740373	1573	144 - 257	11325	Asn-9 to Ser-20.		S0114: 1 and H0589: 1.		
HCWUL74	690750	1574	20 - 307	11326	Lys-17 to Gln-23, Glu-77 to Phe-82.		H0305: 1 and H0589: 1.		
HCWUL83	527566	1575	359 - 556	11327	Pro-50 to Asp-57.		H0305: 2 and H0589: 1.		
HCWUN05	928191	1576	27 - 221	11328	Ala-12 to His-20, His-22 to Met-29.		H0402: 1, H0305: 1 and H0589: 1.		
HCWUO10	861840	1577	320 - 493	11329	Arg-7 to Ser-19.		H0589: 2		
HCWUO81	756978	1578	134 - 436	11330	Ser-15 to Arg-20, His-27 to Lys-44, Gly-55 to Ser-61, Pro-69 to Gln-74.		H0589: 2		
HCWUP64	746328	1579	89 - 226	11331	Asn-17 to Phe-25, Ser-41 to Arg-46.		H0305: 1, H0589: 1 and H0543: 1.		
HCWUQ02	968431	1580	283 - 489	11332	Pro-13 to Pro-19.		H0305: 3 and H0589: 1.		
HCWUQ77	719064	1581	2 - 118	11333			H0305: 1, H0589: 1 and S0052: 1.		
HCWUR43	714529	1582	28 - 312	11334	Pro-8 to Cys-21,		H0589: 2 and H0305: 1.		



						Ser-56 to Ile-63, Asp-77 to His-85.					
HCWUR83	958776	1583	392 - 258	11335						H0589: 2 and L0769: 1.	
HCWUR95	711186	1584	12 - 326	11336		Thr-8 to Lys-15, Gly-17 to Lys-26, Thr-84 to Asp-90.				H0305: 1 and H0589: 1.	
HCWUS02	919224	1585	37 - 132	11337		Gln-13 to Ser-25.				H0589: 1 and H0318: 1.	
HCWUS29	690351	1586	50 - 211	11338		Ser-1 to Cys-14.				H0589: 1, S0426: 1 and L0362: 1.	
HCWUS63	542330	1587	2 - 457	11339		Pro-6 to Asn-16, Pro-21 to Tyr-31, Pro-49 to Gln-55, Asp-61 to Gly-66, Gln-78 to Cys-87.				H0305: 2, H0589: 2 and H0635: 1.	
HCWUS72	855815	1588	52 - 330	11340		Arg-5 to Ala-12, Ser-15 to Val-20, Pro-35 to Ala-44, Thr-70 to Lys-79.				H0589: 1 and S0002: 1.	
HCWUT24	676902	1589	242 - 400	11341		Asn-4 to Gln-9.				H0589: 2	
HCWUT46	861836	1590	3 - 239	11342		Thr-9 to Lys-18.				H0305: 4, H0589: 1 and L0601: 1.	
HCWUU04	614859	1591	179 - 361	11343						H0305: 2 and H0589: 1.	
HCWUU07	861959	1592	166 - 510	11344		Ala-58 to Leu-63.				H0305: 1 and H0589: 1.	
HCWUU16	661570	1593	3 - 203	11345						H0305: 1 and H0589: 1.	
HCWUU58	735736	1594	3 - 107	11346						S0218: 1 and H0589: 1.	
HCWUU78	574908	1595	202 - 447	11347		Asp-26 to Asn-32.				H0305: 2 and H0589: 1.	
HCWUV17	662485	1596	150 - 353	11348		Leu-27 to Thr-33.				H0305: 4 and H0589: 1.	
HCWUV24	676909	1597	3 - 167	11349		Lys-1 to Arg-13, Leu-36 to Pro-41.				H0589: 2	
HCWUV28	686171	1598	2 - 193	11350		Gln-59 to Gly-64.				H0589: 1 and S0052: 1.	
HCWUV65	676334	1599	1 - 192	11351		His-15 to Ser-30, Pro-38 to Ser-43, Arg-46 to Asp-52.				H0305: 1 and H0589: 1.	
HCWUV76	615554	1600	97 - 225	11352		Glu-3 to Gln-14.				H0305: 1 and H0589: 1.	
HCWUW01	915860	1601	367 - 507	11353						H0589: 2	
HCWUW04	614844	1602	3 - 281	11354		Arg-42 to Gly-48.				H0305: 4 and H0589: 2.	

HCWUW55	964086	1603	3 - 143	11355	Gln-57 to Ser-64. Lys-1 to Trp-8, Met-22 to Gly-29, Ile-40 to His-46.	H0589: 2		
HCWUW58	694016	1604	1 - 279	11356		H0305: 1 and H0589: 1.		
HCWUW69	882383	1605	230 - 391	11357		H0305: 1 and H0589: 1.		
HCWUW76	769808	1606	2 - 514	11358		H0305: 1 and H0589: 1.		
HCWUW84	782840	1607	92 - 238	11359	Gly-20 to Val-25, Pro-32 to Asp-41.	S0114: 1 and H0589: 1.		
HCWUW90	712303	1608	31 - 183	11360	Ile-1 to His-6.	H0305: 2 and H0589: 1.		
HCWUW95	706528	1609	4 - 204	11361	Met-21 to Gln-27, Arg-38 to Phe-44.	H0589: 2		
HCWUX02	852993	1610	272 - 466	11362	Cys-3 to Thr-9.	H0589: 2		
HCWUX25	614857	1611	269 - 418	11363	Trp-9 to Cys-14.	H0589: 2		
HCWUX78	773336	1612	35 - 214	11364		H0402: 1, H0589: 1, L0748: 1 and L0749: 1.		
HCWUY16	661550	1613	266 - 541	11365	Arg-18 to Lys-24.	H0305: 1 and H0589: 1.		
HCWUY19	922920	1614	482 - 913	11366	Ala-2 to Gly-12.	L0748: 4, H0305: 2 and H0589: 1.		
HCWUY26	681249	1615	66 - 158	11367		H0305: 1 and H0589: 1.		
HCWUY41	711771	1616	3 - 149	11368	Lys-1 to Lys-7.	H0589: 2		
HCWUY69	615630	1617	487 - 32	11369		H0305: 1 and H0589: 1.		
HCWVA18	849894	1618	1 - 312	11370	Ser-19 to Ala-27.	H0305: 3, H0589: 1 and L0769: 1.		
HCWVA25	754314	1619	10 - 159	11371		H0589: 2		
HCWVA44	716347	1620	1 - 135	11372		H0305: 1 and H0589: 1.		
HCWVF94	793533	1621	190 - 303	11373		H0305: 1, H0589: 1 and L0748: 1.		
HCWWH59	770274	1622	139 - 450	11374	Thr-1 to Arg-14, Gln-29 to Ile-37, Thr-43 to Cys-48.	H0305: 1 and H0589: 1.		
HCWWH65	747324	1623	22 - 162	11375	Arg-6 to Ser-11.	H0589: 2 and H0305: 1.		
HCWWH67	772342	1624	158 - 340	11376	Pro-20 to Leu-33, Pro-43 to Ser-48.	H0305: 2 and H0589: 1.		
HCWWH69	861830	1625	2 - 319	11377	Phe-14 to Pro-21.	H0589: 3		

HDCAC05	975255	1626	2 - 178	11378	Pro-6 to Ser-20, Cys-23 to Thr-33, Glu-43 to Gly-49.	H0637: 3		
HDCAD10	963330	1627	141 - 440	11379	Pro-19 to Arg-27, Thr-58 to Trp-72.	H0637: 2		
HDCAG86	852970	1628	2 - 190	11380		H0637: 2		
HDCAP64	922818	1629	173 - 313	11381	Ser-8 to Val-14, His-34 to Phe-41.	H0637: 2		
HDCAV79	881404	1630	1 - 432	11382		H0637: 1 and S0052: 1.		
HDCAY54	959750	1631	1 - 366	11383		H0637: 1 and S0052: 1.		
HDCBO38	961931	1632	56 - 226	11384	Gln-33 to Thr-40.	H0637: 2		
HDDMA83	926991	1633	2 - 571	11385	Glu-1 to Gly-13, Tyr-35 to Arg-42, Glu-95 to His-103, Leu-113 to Gly-119, Ala-139 to Glu-144.	H0641: 1 and H0521: 1.		
HDDNY79	933804	1634	3 - 455	11386	Asn-77 to Ser-82, Pro-112 to Ile-118.	H0637: 1 and H0641: 1.		
HDDOC53	934157	1635	742 - 509	11387	Tyr-16 to Gly-22, Pro-40 to Gln-45, Pro-70 to Gly-78.	S0002: 2, L0770: 2, L0769: 2, L0766: 2, L0518: 2, L0783: 2, H0521: 2, L0777: 2, L0731: 2, H0556: 1, H0650: 1, H0657: 1, H0486: 1, L0055: 1, H0641: 1, S0426: 1, L0662: 1, L0775: 1, L0655: 1, L0665: 1, S0053: 1, H0659: 1, L0754: 1, L0779: 1, L0759: 1 and H0422: 1.		
HDLAC80	799887	1636	109 - 315	11388	Gly-44 to Gly-53, Leu-56 to Lys-61.	H0485: 2		
HDLAD61	775541	1637	1 - 372	11389	Thr-2 to Arg-14.	H0485: 2	15q22.3	151670, 600374, 601780
HDLAH25	796174	1638	118 - 336	11390		H0485: 2 and H0580: 1.		
HDLAK03	923285	1639	2 - 214	11391		H0485: 2		
HDLAN36	923478	1640	1 - 99	11392		H0485: 2		

HDLA027	787084	1641	66 - 188	11393	Lys-1 to Lys-10, Thr-22 to Glu-28, Arg-35 to Lys-41.	H0485: 1 and H0090: 1.		
HDLAQ50	723854	1642	2 - 88	11394	Pro-1 to Thr-6.	H0485: 2 and L0803: 1.		
HDLAR24	943930	1643	78 - 230	11395		H0543: 2 and H0485: 1.		
HDLAV29	922276	1644	220 - 393	11396	Lys-1 to Lys-13.	S0116: 1, H0485: 1 and H0421: 1.		
HDLBB03	923286	1645	3 - 134	11397	Phe-10 to Arg-21.	H0485: 1 and H0090: 1.		
HDMAQ15	941282	1646	1147 - 152	11398		AR089: 55, AR061: 26 S0142: 2, H0657: 1, H0638: 1, S0278: 1, S0144: 1, S0344: 1, L0777: 1 and L0599: 1.		
HDMBH76	883212	1647	307 - 723	11399	Asp-14 to Gly-24, Gly-31 to Val-36, Gln-58 to Pro-69, Lys-83 to Gly-90, Leu-97 to Thr-103.	H0521: 2, H0638: 1 and L0365: 1.		
HDMBK12	968954	1648	40 - 246	11400		S0114: 1 and H0638: 1.		
HDPAA89	693445	1649	115 - 303	11401	Ser-12 to Gly-18, Ser-25 to Ser-30.	L0748: 3, H0354: 1, S0344: 1 and H0521: 1.		
HDPAB03	924124	1650	76 - 369	11402	Leu-5 to Thr-10, Arg-12 to Glu-19, Pro-41 to Cys-47, Pro-58 to Leu-70.	H0521: 2		
HDPAD22	674560	1651	2 - 205	11403	Arg-1 to Arg-6, Arg-17 to Pro-24.	H0416: 1, L0761: 1, L0766: 1 and H0521: 1.		
HDPAE86	709072	1652	59 - 328	11404	Tyr-41 to Gly-50.	L0748: 2, H0521: 1 and H0543: 1.		
HDPAF70	881626	1653	1 - 465	11405	Glu-37 to Gly-42, Gly-130 to Trp-136, Ser-138 to Gln-145.	H0521: 2		
HDPA G03	771636	1654	55 - 228	11406	Asp-1 to Ile-7, Arg-22 to Ile-32.	H0521: 5 and H0522: 1.		
HDPA G32	947832	1655	119 - 607	11407	Ser-14 to Met-19, Thr-125 to Arg-133.	AR089: 25, AR061: 8 H0521: 2, H0581: 1 and H0423: 1.		

HDPAH10	969041	1656	530 - 144	11408	Pro-30 to Pro-37, Gln-43 to Lys-48, Lys-56 to Asp-74, Gln-76 to Gln-82, Thr-93 to Ala-101, Met-107 to Trp-117.	L0775: 3, L0748: 3, H0521: 2, L0749: 2, H0486: 1, H0069: 1, H0271: 1, H0560: 1, S0426: 1, L0655: 1, S0216: 1, H0423: 1 and H0422: 1.		
HDPAQ24	677179	1657	2 - 439	11409	Pro-5 to Pro-20, Thr-58 to Leu-63, Ala-71 to Arg-79, Ala-99 to Arg-105.	S0052: 1 and H0521: 1.		
HDPAS40	860041	1658	261 - 581	11410		S0053: 1 and H0521: 1.		
HDPBV74	916457	1659	1 - 330	11411	Asp-1 to Ala-6, Phe-34 to Asp-42, Ala-61 to Asp-67.	H0521: 8		
HDPZ46	719024	1660	252 - 446	11412	Pro-12 to Gly-19, Ser-33 to Ala-38.	H0521: 2		
HDPZ73	756742	1661	308 - 460	11413		H0486: 1 and H0521: 1.		
HDPBC24	760623	1662	1 - 228	11414		H0521: 2		
HDPBD79	973367	1663	1 - 135	11415	Arg-35 to Lys-45.	H0341: 1 and H0521: 1.		
HDPBJ94	945460	1664	360 - 710	11416	Thr-22 to Tyr-35, Ala-84 to Ser-91.	AR061: 2, AR089: 2 S0116: 1, L0768: 1, L0656: 1, H0521: 1, L0070: 1, L0439: 1 and L0779: 1.		
	972094	9555	783 - 502	19307				
HDPBM64	773091	1665	182 - 352	11417	Phe-15 to Ile-22.	H0341: 1, H0521: 1 and L0595: 1.		
HDPBO71	888109	1666	3 - 203	11418		AR051: 35, AR054: 16, AR050: 13 H0641: 1 and H0521: 1.		
HDPBS54	904762	1667	1145 - 1351	11419	Thr-28 to Pro-36, Ala-43 to Thr-49.	H0521: 9, L0595: 2, H0522: 1, L0593: 1 and L0594: 1.		
	909915	9556	177 - 341	19308				
HDPBW10	964553	1668	1 - 231	11420	Arg-61 to Phe-68.	H0521: 2 and H0522: 1.		
HDPBW26	670345	1669	3 - 137	11421	Val-23 to Pro-45.	H0581: 1 and H0521: 1.		
HDPBX82	779848	1670	301 - 453	11422		H0521: 2 and L0803: 1.		
HDPBY23	858345	1671	27 - 272	11423	Glu-74 to His-82.	L0509: 2, L0005: 1, H0179:		

HDPCC48	709005	1672	56 - 304	11424	Asp-1 to Leu-12, Leu-21 to Gly-28, Trp-35 to Gly-43, Arg-52 to Gly-61.	1, H0521: 1, L0749: 1 and H0542: 1. H0583: 1 and H0521: 1.		
HDPCH65	950716	1673	249 - 371	11425		L0766: 1, H0521: 1 and H0444: 1. H0521: 3		
HDPCK27	683383	1674	151 - 462	11426	Ala-9 to Ala-15, Ser-21 to Arg-35, Thr-60 to Pro-65.			
HDPCK66	766231	1675	192 - 392	11427	Ser-20 to Trp-30.	H0264: 1 and H0521: 1.		
HDPCK35	973352	1676	1 - 468	11428	Ser-32 to Thr-40, Pro-43 to Trp-48.	H0521: 2		
HDPCK22	927838	1677	2 - 622	11429	Glu-1 to Leu-7, Ser-31 to Glu-54, Lys-67 to Val-73, Lys-88 to Ser-103, Lys-110 to Phe-115, Val-122 to Glu-137, Gly-139 to Lys-154, Glu-167 to Asp-173, Gln-175 to Met-183.	H0264: 1, H0521: 1 and L0748: 1.		
HDPCN94	794275	1678	3 - 767	11430		AR089: 5, AR061: 2 H0521: 2	6q25	180020, 600320, 600883
HDPCR34	852871	1679	339 - 190	11431	Pro-1 to Val-12.	H0521: 2 and H0179: 1.		
HDPCS43	714479	1680	3 - 311	11432		H0179: 1 and H0521: 1.		
HDPCV60	720278	1681	282 - 512	11433		L0754: 6, L0747: 4, H0521: 3, L0748: 2, S0002: 1 and L0749: 1.		
HDPCW90	612234	1682	8 - 439	11434	Ser-70 to Ala-80.	H0542: 3, H0090: 2, H0522: 2, H0556: 1, H0141: 1, S0002: 1 and H0521: 1.		
HDPCY03	924057	1683	24 - 356	11435	His-21 to Arg-28, Pro-64 to Thr-70, Pro-99 to Ala-104.	H0521: 2		

HDP CY43	958157	1684	228 - 383	11436	His-1 to Gln-16, Tyr-27 to Lys-32.	H0370: 1 and H0521: 1.		
HDP CY93	571375	1685	83 - 394	11437		S0134: 2, S0114: 1, H0521: 1 and L0740: 1.		
HDP DJ78	773556	1686	2 - 346	11438		H0521: 2		
HDP DJ24	677166	1687	173 - 361	11439	Gln-1 to Glu-10, Asp-15 to Ala-24.	H0521: 2 and L0748: 1.		
HDP DJ90	735027	1688	227 - 454	11440	Ser-6 to Cys-21, Ser-30 to Ser-44.	H0264: 1 and H0521: 1.		
HDP DL62	691647	1689	239 - 415	11441	Asp-1 to Arg-7.	H0521: 2, H0580: 1 and L0518: 1.		
HDP DL79	774943	1690	269 - 583	11442	Lys-7 to Ser-12, Pro-24 to Thr-30.	H0521: 2		
HDP DN08	959332	1691	283 - 939	11443	Ile-30 to Pro-35, Thr-68 to Asn-77, Pro-87 to Gln-93, Gly-142 to Leu-149.	H0521: 1 and H0542: 1.		
HDP DO46	719010	1692	166 - 417	11444	Pro-11 to Arg-18.	H0521: 1 and H0522: 1.		
HDP FC15	745045	1693	15 - 209	11445	Ser-2 to Arg-12.	H0521: 2		
HDP FF07	974494	1694	178 - 513	11446	Ala-1 to Glu-21, Gly-27 to Gly-32, Gln-34 to Gly-42, Ala-55 to Ala-63, Asp-74 to Gly-81, Glu-98 to Gly-105.	H0521: 4		
HDP FJ21	852824	1695	3 - 140	11447		H0318: 1 and H0521: 1.		
HDP FQ93	772456	1696	2 - 343	11448	Glu-1 to Glu-9, Leu-30 to Gln-35, Thr-76 to Gln-81, Gly-85 to Glu-91.	H0271: 1 and H0521: 1.		
HDP FV55	575202	1697	472 - 230	11449	Ser-1 to Ser-14.	H0075: 1, L0766: 1, H0521: 1 and L0748: 1.		
HDP FW80	734937	1698	224 - 508	11450	Met-14 to Leu-28, Pro-30 to Leu-38, Ser-62 to Ala-67.	S0053: 1 and H0521: 1.		
HDP FY90	788870	1699	3 - 173	11451		H0521: 2		

HDPFZ58	735975	1700	1 - 234	11452	Pro-7 to Trp-14, Gly-53 to Glu-60, Met-71 to Lys-78.	H0583: 1, H0521: 1 and H0543: 1.		
HDPGB73	574603	1701	129 - 257	11453	Asp-1 to Tyr-20.	H0581: 1, H0271: 1 and H0521: 1.		
HDPGG28	625678	1702	1 - 351	11454	Thr-37 to Arg-43, Ala-49 to Gly-54, Pro-59 to Gly-66, Glu-83 to Arg-89.	H0521: 3		
HDPGH27	937144	1703	196 - 312	11455		H0486: 1 and H0521: 1.	11p15	108985, 186921, 602092
HDPGI14	415961	1704	283 - 444	11456		H0521: 2		
HDPGL21	760926	1705	38 - 232	11457	Ala-17 to Arg-23.	H0521: 2		
HDPGJ95	919792	1706	243 - 455	11458		H0521: 2		
HDPGL65	666830	1707	186 - 67	11459		S0114: 1 and H0521: 1.		
HDPGM85	783563	1708	271 - 429	11460	Lys-37 to Trp-46.	H0521: 2		
HDPGO30	780359	1709	1 - 420	11461	Pro-4 to Ala-10, Ala-12 to Trp-22, Ser-24 to Lys-33, His-42 to Phe-49, Ile-56 to Gln-70, Glu-122 to Glu-140.	H0521: 2		
HDPGO52	852800	1710	3 - 188	11462	Glu-1 to Arg-10, Gly-12 to Glu-22, His-25 to Gln-33.	S0002: 1 and H0521: 1.		
HDPGP54	464312	1711	215 - 466	11463	Ala-1 to Gly-14.	H0341: 1 and H0521: 1.		
HDPGP75	872249	1712	219 - 422	11464	Gly-18 to Pro-26.	H0521: 2		
HDPGT43	495783	1713	515 - 219	11465		H0063: 1 and H0521: 1.		
	852795	9557	408 - 617	19309				
	852806	9558	250 - 369	19310				
HDPGU50	720595	1714	231 - 344	11466		H0521: 3 and S0053: 1.		
HDPGX44	683277	1715	260 - 406	11467	Thr-28 to Arg-39.	H0521: 1 and H0522: 1.		
HDPHB75	915912	1716	27 - 140	11468		H0521: 4, H0522: 1, H0542: 1 and H0543: 1.		
HDPHF59	677172	1717	97 - 225	11469	Ser-30 to Arg-38.	H0537: 1 and H0521: 1.		
HDPHG23	416041	1718	108 - 326	11470	Thr-1 to Asp-7.	H0521: 2		



HDPHG42	732133	1719	1 - 408	11471		H0521: 2, H0583: 1, H0341: 1, L0142: 1, H0445: 1 and H0543: 1.		
HDPHG89	733198	1720	410 - 601	11472		H0521: 1 and H0444: 1.		
HDPHH51	921093	1721	3 - 332	11473	Arg-1 to Leu-6, Thr-30 to Asn-36, Arg-48 to Ile-53, Asn-65 to Ser-85, Glu-92 to Asn-109.	S0298: 1 and H0521: 1.		
HDPHI02	919825	1722	275 - 460	11474	Ser-1 to Asp-6.	H0305: 1 and H0521: 1.		
HDPHI71	760325	1723	1 - 210	11475	Ala-1 to Ser-10, Pro-22 to Ser-34, Gln-47 to Asn-55.	H0521: 1 and H0522: 1.		
HDPHU36	706624	1724	178 - 309	11476	Ser-30 to Arg-36.	H0521: 2		
HDPHK96	921957	1725	1 - 516	11477	Pro-1 to His-6, Ser-13 to Cys-22, Lys-49 to Glu-54, Arg-60 to Trp-72, Arg-90 to Arg-99, Gln-117 to His-127.	H0402: 2, S0052: 2, S0428: 2, H0271: 1, H0521: 1 and H0445: 1.		
HDPILA15	772020	1726	2 - 592	11478	Gln-7 to Lys-13, Tyr-17 to Glu-26, Asp-97 to Ser-104, Asn-135 to Met-140.	H0521: 1 and H0522: 1.		
HDPIC37	954869	1727	377 - 694	11479	Lys-1 to Thr-14, Glu-28 to Val-34, Lys-56 to Ala-66, Glu-72 to Lys-79.	H0521: 2		
HDPID10	928163	1728	2 - 559	11480	Glu-16 to Gln-25, His-36 to His-45, His-48 to His-57, His-63 to Gln-70, Ala-76 to His-93, Gln-97 to Gly-107, Glu-121 to Gly-137.	H0521: 2		
HDPID37	868169	1729	82 - 276	11481	Pro-42 to Gln-65.	H0341: 3, H0656: 1, H0580:		

									1, S0344: 1, S0002: 1 and H0521: 1.			
HDPJE42	713081	1730	199 - 399	11482				Arg-7 to Glu-19.	H0250: 1 and H0521: 1.			
HDPJF86	591540	1731	2 - 205	11483				Lys-1 to Gly-10, Arg-17 to Arg-33, Ala-39 to Pro-50.	H0521: 4, L0740: 1 and L0593: 1.	14q11.2		182600, 186880, 190195, 190195, 222700, 600243, 602279, 602279
HDPJH48	677664	1732	7 - 405	11484				Thr-16 to Arg-22, Gly-28 to Gly-36, Gln-43 to His-60.	H0580: 1, S0278: 1 and H0521: 1.			
HDPJP26	681519	1733	268 - 528	11485					H0580: 1, H0521: 1 and L0748: 1.			
HDPJQ55	961163	1734	72 - 278	11486				Pro-16 to Tyr-21, Ser-34 to Trp-40, Ser-57 to Thr-67.	L0748: 3, H0271: 2 and H0521: 1.	9q12		602014
HDPJQ65	747791	1735	287 - 424	11487					H0521: 2			
HDPJT53	926498	1736	33 - 383	11488				Pro-16 to Ser-21.	H0581: 1 and H0521: 1.			
HDPJT61	741724	1737	1 - 420	11489				Glu-1 to Arg-33, Gly-45 to Pro-52, Pro-62 to Ser-71, Pro-83 to Trp-95.	AR089: 1, AR061: 0 H0521: 1 and H0522: 1.			
HDPJA04	628745	1738	37 - 261	11490				Leu-1 to Trp-8, Ala-36 to Gly-41.	H0521: 2			
HDPJA26	767110	1739	3 - 428	11491				Gln-1 to Asp-7, Leu-41 to Glu-47, Lys-55 to Glu-62, Ser-113 to Trp-119.	H0521: 2			
HDPJB08	921453	1740	3 - 194	11492				Gln-1 to Tyr-7.	H0265: 1 and H0521: 1.			
HDPJ05	911170	1741	1 - 333	11493					AR050: 11, AR054: 1, AR051: 0 S0002: 2, H0185: 1, H0521: 1, H0576: 1 and L0779: 1.			
	928715	9559	1178 - 759	19311								
HDPJK06	852781	1742	282 - 452	11494					H0063: 1 and H0521: 1.			
HDPJK73	765446	1743	265 - 417	11495					H0521: 2			
HDPJN68	752907	1744	198 - 317	11496				Lys-4 to Asn-9,	H0083: 1 and H0521: 1.			

HDPJO40	711003	1745	2 - 163	11497	Arg-30 to His-35. Gly-14 to Ser-20, Lys-35 to Lys-47.	H0589: 1 and H0521: 1.		
HDPJP32	918630	1746	1 - 153	11498		H0580: 1 and H0521: 1.		
HDPJP79	538038	1747	264 - 473	11499	Gln-1 to Thr-6.	H0421: 1 and H0521: 1.		
	774743	9560	281 - 111	19312	His-3 to Asp-11, Leu-13 to Thr-27, Ser-47 to Arg-54.			
HDPJR11	965011	1748	1 - 288	11500		H0521: 1 and H0522: 1.		
HDPJU86	785391	1749	503 - 279	11501		L0439: 6, L0752: 4, L0794: 3, L0805: 2, L0776: 2, L0438: 2, L0756: 2, H0486: 1, L0435: 1, H0641: 1, L0803: 1, L0666: 1, H0521: 1 and L0755: 1.		
HDPKD52	959653	1750	163 - 447	11502		S0114: 1, H0656: 1, S0002: 1, S0426: 1, S0052: 1, S0053: 1 and H0521: 1.		
HDPKD82	778970	1751	10 - 177	11503	Ala-46 to His-51.	H0521: 1 and H0445: 1.		
HDPKI40	710991	1752	1 - 369	11504	Pro-65 to Gly-75, Pro-80 to Gly-91, Lys-98 to Gly-111.	H0521: 1 and H0542: 1.		
HDPKK25	677921	1753	1 - 126	11505	Cys-33 to Pro-42.	S0134: 1 and H0521: 1.		
HDPKB25	965139	1754	19 - 183	11506	Gln-21 to Gln-39.	H0521: 2 and L0748: 2.		
HDPKC45	909091	1755	235 - 828	11507		AR089: 1, AR061: 0 L0439: 3, L0438: 2, H0521: 2, L0773: 1, L0662: 1, L0766: 1, H0542: 1 and H0543: 1.		
HDPLC60	740144	1756	88 - 396	11508	Gly-23 to Gly-37, Ala-39 to Arg-48.	H0521: 2		
HDPLD11	966610	1757	77 - 331	11509	Ser-34 to Asp-41.	H0521: 2		
HDPLD29	690409	1758	310 - 432	11510		H0521: 2		
HDPLD57	734528	1759	203 - 394	11511		H0521: 2		
HDPLD89	786704	1760	319 - 435	11512		H0521: 2		
HDPLE38	706639	1761	185 - 328	11513	Gly-16 to Trp-21,	H0521: 2		

HDPLE63	703477	1762	1 - 447	11514	Val-27 to Trp-32. Tyr-3 to Arg-10, Arg-21 to Lys-32, Gln-43 to Glu-51, Ile-72 to Thr-81, Lys-97 to Asp-102.	H0521: 2 and H0486: 1.		
HDPLE75	852685	1763	51 - 236	11515		H0521: 2		
HDPLE88	625293	1764	80 - 202	11516	Glu-18 to Thr-24.	H0521: 2		
HDPLE96	915966	1765	225 - 449	11517		H0521: 2		
HDPLF86	785316	1766	62 - 631	11518	Lys-26 to Ser-32, Met-110 to Glu-115.	H0521: 2 and L0591: 1.		
HDPLG10	964213	1767	376 - 203	11519	Phe-36 to Lys-48.	H0521: 2, H0402: 1 and L0741: 1.		
HDPLJ28	840111	1768	1 - 96	11520		H0521: 2		
HDPLK49	835603	1769	1 - 213	11521		H0521: 2		
HDPLN06	935010	1770	118 - 408	11522	Ile-1 to Ala-6, Gly-36 to Leu-41.	H0521: 2		
HDPLN76	921700	1771	249 - 404	11523		H0306: 1 and H0521: 1.		
HDPL050	724098	1772	424 - 621	11524		T0041: 1 and H0521: 1.		
HDPLT29	958196	1773	1 - 216	11525	Pro-1 to Ala-12, Arg-19 to Gly-25.	H0305: 1, S0344: 1 and H0521: 1.		
HDPLV74	765334	1774	270 - 479	11526	Met-1 to Pro-11.	H0556: 1 and H0521: 1.		
HDPM48	582015	1775	2 - 706	11527	Asp-1 to Lys-17, Ala-53 to Lys-61, Asp-66 to Arg-73.	AR089: 19, AR061: 15 H0581: 1, H0521: 1 and H0522: 1.		
HDPMC49	852767	1776	813 - 1061	11528		H0265: 1 and H0522: 1.		
HDPMF53	733466	1777	187 - 327	11529	Thr-18 to Ala-24, Ser-27 to Trp-32.	H0477: 1 and H0522: 1.		
HDPMH83	661316	1778	1 - 579	11530	Arg-19 to Asp-27, Ser-40 to His-45, Gln-77 to Leu-83.	H0581: 1 and H0522: 1.	21q22.3	120220, 120240, 123580, 151385, 171860, 190685, 236100, 236200, 240300, 267750, 500065, 601072, 601145
HDPMJ93	852763	1779	220 - 510	11531	Gln-11 to His-20,	H0264: 1 and H0522: 1.		

HDPMO62	912722	1780	1 - 582	11532	Ser-85 to Ser-90. Ala-14 to Gly-20, Gly-34 to Pro-44, His-128 to Ser-134.	AR089: 1 S0002: 2 and H0522: 1.		
HDPMP25	678068	1781	347 - 601	11533	Arg-1 to Pro-6, Gln-23 to Asn-35, Thr-49 to Lys-60.	S0116: 1 and H0522: 1.		
HDPMQ34	956248	1782	228 - 374	11534	Thr-44 to Ile-49.	H0522: 2		
HDPMS42	713759	1783	96 - 263	11535		L0005: 2, L0740: 2, L0157: 1, L0766: 1, L0809: 1, L0787: 1, S0052: 1, H0522: 1, L0741: 1 and L0749: 1.		
HDPMV53	697470	1784	97 - 270	11536	Ser-50 to Asn-58.	S0212: 1, L0438: 1 and H0522: 1.		
HDPMW22	665153	1785	124 - 366	11537		H0522: 2, H0581: 1, H0063: 1 and H0521: 1.		
HDPMZ01	916447	1786	1 - 195	11538	Thr-19 to Arg-26.	L0777: 3 and H0522: 2.		
HDPNA03	924082	1787	7 - 78	11539		H0522: 2		
HDPNC96	934520	1788	3 - 734	11540	Val-2 to Gly-8, Asp-20 to Gln-26.	AR089: 1, AR061: 1 H0522: 2 and L0766: 1.		
HDPND35	973108	1789	80 - 466	11541	Asn-1 to Asp-6, Ala-20 to Ala-27, Ser-34 to Ile-47, Pro-60 to Ser-65, Arg-82 to Trp-87.	H0521: 2 and H0522: 1.		
HDPNE60	974827	1790	37 - 939	11542	Gly-2 to Lys-8.	H0556: 3 and H0522: 1.	5q32-q33	109690, 109690, 131400, 138491, 138491, 138491, 154500, 180071, 181460, 222600, 222600, 222600, 234000, 272750, 600807, 601411, 601596, 602089
HDPNI03	924081	1791	111 - 413	11543	Ala-10 to Ala-23, Thr-49 to Trp-64,	L0471: 2 and H0522: 2.		

HDPNJ14	767447	1792	3 - 149	11544	Gln-80 to Arg-87. Thr-15 to Ala-22, Glu-43 to Ser-48.	H0264: 1 and H0522: 1.		
HDPOC44	707241	1793	119 - 481	11545	Asp-49 to Lys-58, Gln-71 to Ser-80, Ser-112 to Arg-117.	H0486: 1, H0090: 1 and H0522: 1.		
HDPOD96	939770	1794	14 - 277	11546	Arg-6 to Pro-14, Arg-22 to Glu-29, Leu-59 to Arg-64.	H0521: 2 and H0522: 1.		
HDPOF25	852745	1795	215 - 475	11547	Lys-1 to Gln-7.	H0589: 2 and H0522: 1.		
HDPOI52	927699	1796	114 - 422	11548	Ala-73 to Ala-89.	S0114: 1, H0179: 1, L0761: 1 and H0522: 1.		
HDPOJ93	792193	1797	140 - 343	11549		H0179: 2 and H0522: 1.		
HDPOK47	973097	1798	153 - 311	11550	Thr-3 to Leu-10, Pro-19 to Thr-29.	H0087: 1 and H0522: 1.		
HDPOL60	767953	1799	2 - 148	11551	Gln-31 to Arg-38.	H0583: 1 and H0522: 1.		
HDPOL66	681391	1800	280 - 438	11552		H0580: 1 and H0522: 1.		
HDPOX65	674963	1801	107 - 226	11553		H0264: 1 and H0522: 1.		
HDPOY33	702285	1802	31 - 207	11554	Asn-13 to Met-21, Asn-23 to Gln-37, Gly-53 to Ser-59.	S0002: 1 and H0522: 1.		
HDPOZ51	926977	1803	3 - 416	11555	Gly-10 to Leu-17.	H0486: 1 and H0522: 1.		
HDPPA66	870840	1804	231 - 497	11556		H0635: 1, S0002: 1, H0522: 1 and L0748: 1.		
HDPPC83	683656	1805	3 - 263	11557		S0114: 1 and H0522: 1.		
HDPPD59	708334	1806	3 - 236	11558		H0522: 1 and H0436: 1.		
HDPPG35	579315	1807	2 - 550	11559	Gly-4 to Glu-12.	H0083: 1 and H0522: 1.		
HDPPG86	923846	1808	175 - 342	11560		H0522: 2		
HDPPK33	666510	1809	259 - 453	11561	Thr-15 to Gly-27.	L0748: 3, L0777: 2, H0421: 1, L0762: 1, L0805: 1, L0783: 1, L0788: 1, L0532: 1, H0521: 1, H0522: 1 and L0756: 1.		
HDPLL30	692095	1810	74 - 241	11562	Arg-8 to His-27, Thr-38 to Thr-48.	S0002: 1 and H0522: 1.		
HDPPM09	625281	1811	2 - 529	11563	Val-1 to Pro-10.	H0521: 2 and H0522: 1.	1p32	120950, 120960,

						Leu-12 to Arg-39, Cys-44 to Gly-57, Lys-94 to Gly-99, Glu-114 to Ser-134, Pro-145 to Phe-165.					138140, 178300, 187040, 600101, 600650, 600650, 600722, 600722
HDPN33	958993	1812	3 - 95	11564		Lys-1 to Lys-8, Arg-16 to Lys-26.				H0522: 2	
HDPN59	909867	1813	174 - 473	11565		Arg-9 to Ala-15, Tyr-37 to Lys-42, Glu-48 to Gly-54.				AR061: 1, AR089: 0 H0522: 2 and L0758: 1.	
HDPN88	963382	1814	334 - 555	11566		Pro-59 to Asn-65.				H0271: 1, S0426: 1 and H0522: 1.	
HDPN24	812091	1815	1 - 474	11567		Pro-1 to Arg-17, Asn-60 to Phe-69.				H0580: 1 and H0522: 1.	
HDPN39	712993	1816	302 - 460	11568		Leu-14 to Gly-20.				S0114: 1, H0305: 1, H0522: 1 and H0423: 1.	
HDPN30	671973	1817	2 - 310	11569		Ser-40 to Arg-46, Thr-51 to Asp-60.				H0179: 1 and H0522: 1.	
HDPN44	951276	1818	176 - 376	11570						AR089: 3, AR061: 1 L0755: 4, H0521: 1 and H0522: 1.	
HDPN36	785239	1819	156 - 308	11571		Asn-1 to Phe-9, Pro-20 to Ser-31, Asn-40 to Lys-45.				H0583: 1, H0522: 1 and L0740: 1.	
HDPN43	674958	1820	1 - 303	11572		Ser-19 to Ser-25.				H0264: 1, H0521: 1 and H0522: 1.	
HDPN91	973075	1821	131 - 331	11573		Lys-1 to Gln-10, Asn-56 to Ser-67.				H0522: 2 and H0521: 1.	
HDPN21	786516	1822	66 - 281	11574						H0522: 3	
HDPN83	830539	1823	125 - 295	11575		Gly-28 to Asn-38.				H0522: 2 and H0421: 1.	
HDPN45	928430	1824	1 - 273	11576		Ile-43 to Asp-51, Arg-53 to His-61, Pro-63 to Lys-69.				H0521: 1 and H0522: 1.	
HDPN15	789876	1825	26 - 364	11577						H0522: 2	
HDPN64	746043	1826	131 - 301	11578		Phe-1 to Trp-8, Thr-17 to Tyr-27.				H0264: 1 and H0522: 1.	

HDPQL72	760934	1827	1 - 282	11579	Arg-8 to Arg-13, Leu-36 to Asp-73.	H0522: 2		
HDPQN03	923168	1828	270 - 449	11580		H0650: 1, H0580: 1 and H0522: 1.		
HDPQO40	949723	1829	1740 - 1048	11581	Arg-5 to Pro-11, Phe-32 to Pro-37, Pro-52 to Arg-59, Ser-75 to Pro-80, Pro-225 to Ser-231.	AR061: 2, AR089: 2 H0486: 3, L0766: 3, L0777: 3, S0002: 2, S0426: 2, L0779: 2, L0759: 2, H0477: 1, L0805: 1, H0522: 1, H0478: 1, L0743: 1, H0445: 1 and H0543: 1.		
HDPQQ77	739816	1830	185 - 352	11582	Tyr-1 to Arg-7.	H0522: 2		
HDPQR31	741278	1831	3 - 434	11583	Leu-28 to Glu-33, Arg-48 to Gly-53, Pro-60 to Glu-66, Leu-70 to Arg-79, Gly-89 to Gly-96.	H0581: 1, H0522: 1 and H0543: 1.		
HDPQU30	768771	1832	250 - 477	11584		H0522: 2		
HDPQV63	744471	1833	111 - 320	11585		L0439: 3, H0585: 1 and H0522: 1.		
HDPRE08	958933	1834	205 - 351	11586		H0220: 1, H0521: 1, L0754: 1 and L0746: 1.		
HDPRE10	961306	1835	123 - 308	11587	Lys-36 to Lys-43.	H0521: 2		
HDPRG09	828572	1836	20 - 241	11588	Ser-7 to Ser-23, Asp-56 to Ser-74.	H0090: 1 and H0521: 1.		
HDPRH02	919404	1837	68 - 790	11589		L0766: 4, L0769: 3, L0774: 3, L0755: 3, L0761: 2, H0521: 2, L0771: 1 and L0777: 1.		
HDPRH59	739077	1838	319 - 450	11590		H0521: 2 and L0766: 1.		
HDPRI39	773790	1839	1 - 192	11591	Gly-14 to Gly-19, Gln-30 to Glu-41.	H0179: 1 and H0521: 1.		
HDPRL58	724652	1840	73 - 252	11592	Pro-26 to Thr-38.	S0114: 1 and H0521: 1.		
HDPRI15	577985	1841	151 - 336	11593	Pro-9 to Lys-16.	H0457: 1 and H0521: 1.		
HDPRP29	690399	1842	115 - 420	11594	Leu-64 to Arg-69.	H0635: 3, H0583: 1, H0521: 1 and L0366: 1.		



HDP RP83	773394	1843	178 - 465	11595			H0521: 2		
HDP RS79	774077	1844	1 - 249	11596	Glu-6 to Phe-20, Thr-60 to Val-65.		S0428: 1 and H0521: 1.		
HDP RY05	958822	1845	101 - 298	11597	Val-32 to Arg-37.		H0521: 2		
HDP RY33	893790	1846	2 - 247	11598	Tyr-39 to Pro-44, Ile-56 to Pro-63.		L0748: 2, S0002: 1, L0659: 1 and H0521: 1.		
HDP RY70	677782	1847	1 - 228	11599	Arg-1 to Gly-7, Ala-9 to Ala-15, Ala-53 to Gly-60.		L0794: 6, L0800: 5, L0771: 3, L0803: 3, L0761: 2, L0764: 2, L0804: 2, H0521: 2, L0750: 2, L0777: 2, H0581: 1, L0769: 1, L0772: 1 and L0757: 1.		
HDP SC55	731496	1848	2 - 238	11600	Arg-11 to Leu-16, Ser-62 to Pro-67.		H0264: 1 and H0521: 1.	11q22	105580, 133780, 602574, 602574
HDP SG10	961323	1849	3 - 206	11601	Arg-1 to Trp-6, Val-33 to Asp-39.		T0041: 1 and H0521: 1.		
HDP SJ84	782867	1850	1 - 423	11602	Cys-13 to Pro-20, Gly-27 to Ala-35, Gly-78 to Ala-83.		H0087: 1 and H0521: 1.		
HDP SM07	620372	1851	289 - 471	11603	Asn-1 to Asn-6.		H0457: 7, L0662: 2, L0766: 1, L0804: 1, L0806: 1, L0655: 1, L0789: 1, S0216: 1, H0521: 1, L0756: 1 and L0755: 1.		
HDP SO36	959141	1852	1 - 243	11604	Glu-4 to Phe-18, Thr-58 to Val-63.		H0521: 3		
HDP SS57	734507	1853	85 - 315	11605	Gln-34 to Gly-41, Ser-61 to Trp-66, Met-71 to Met-77.		S0116: 1 and H0521: 1.		
HDP SU54	670838	1854	25 - 360	11606			H0521: 2, H0436: 1 and H0543: 1.	14q32.3	
HDP SV04	614924	1855	224 - 424	11607	Trp-27 to Tyr-32.		H0521: 4		
HDP SV29	690415	1856	2 - 358	11608	Ala-1 to Gly-9, Ala-12 to Ser-49, His-59 to Thr-65.		H0521: 4		
HDP SY30	691778	1857	172 - 2	11609	Lys-7 to Ser-21.		H0521: 2		

HDPTC31	878639	1858	80 - 367	11610		H0521: 2		
HDPTJ25	706448	1859	160 - 324	11611	Gln-8 to His-15.	H0402: 1 and H0521: 1.		
HDPTJ79	669209	1860	592 - 837	11612	Lys-17 to Gly-27.	L0766: 5, L0777: 2, H0255: 1, H0402: 1, S0344: 1 and H0521: 1.		
HDPTO71	760142	1861	384 - 647	11613		H0551: 1 and H0521: 1.		
HDPTP07	741632	1862	1 - 276	11614		H0521: 2		
HDPTS95	906940	1863	111 - 341	11615	Glu-7 to Ile-14, Ala-38 to Leu-44.	H0521: 2 and H0581: 1.		
HDPTT20	669029	1864	37 - 234	11616		H0521: 2		
HDPTU30	691181	1865	1 - 183	11617		H0521: 2		
HDPTU66	697690	1866	40 - 387	11618	Thr-83 to Gly-88.	H0521: 2		
HDPTU95	876582	1867	147 - 1	11619	Lys-36 to Ser-49.	H0521: 2		
HDPTW90	722699	1868	1 - 282	11620	Gly-13 to Gly-18, Arg-26 to Gly-33, Gly-40 to Gly-49.	AR089: 0, AR061: 0 H0521: 2 and H0641: 1.		
HDPUD28	852687	1869	31 - 261	11621	Thr-22 to Gly-29, Thr-34 to Asn-39.	H0521: 1 and H0445: 1.		
HDPUF77	769852	1870	39 - 197	11622		H0521: 2		
HDPUF94	861520	1871	245 - 400	11623	Tyr-25 to Thr-41.	H0521: 2		
HDPUG06	968313	1872	312 - 437	11624		H0402: 1, H0305: 1 and H0521: 1.		
HDPUQ02	973235	1873	175 - 588	11625	Gly-1 to Pro-15.	AR054: 2, AR051: 1, AR050: 1 H0521: 5		
HDPUS62	604483	1874	3 - 221	11626	Gln-27 to Thr-32, Arg-39 to Ser-45, Lys-53 to Ser-60, Lys-67 to Gln-73.	S0278: 1 and H0521: 1.		
HDPVD09	774165	1875	365 - 544	11627		S0428: 1 and H0521: 1.		
HDPVE36	706712	1876	2 - 385	11628	Ser-7 to Asn-17.	H0486: 1, L0766: 1 and H0521: 1.		
HDPVG11	966556	1877	185 - 922	11629		S0002: 1 and H0521: 1.		
HDPVH13	656711	1878	94 - 303	11630	Val-32 to Arg-45.	L0455: 1, H0521: 1 and H0522: 1.		
HDPVL94	927023	1879	147 - 365	11631		S0428: 1 and H0521: 1.		

HDPVQ96	796133	1880	161 - 274	11632			H0521: 1 and H0445: 1.		
HDPVR71	740340	1881	170 - 307	11633			H0486: 1, H0521: 1 and L0594: 1.		
HDPVU35	852616	1882	164 - 310	11634		Pro-20 to Lys-26.	S0428: 2 and H0521: 2.		
HDPVV46	718160	1883	3 - 359	11635		Arg-1 to Val-9, Pro-19 to Pro-25, Lys-28 to Val-33, Pro-54 to Ala-63, Ser-82 to Glu-93, Pro-100 to His-107, Pro-113 to Gln-119.	H0416: 1 and H0521: 1.		
HDPVV95	582503	1884	182 - 364	11636		Ser-8 to Phe-13, Lys-21 to Arg-32.	S0002: 1 and H0521: 1.		
HDPVW13	656715	1885	198 - 521	11637			H0090: 1 and H0521: 1.		
HDPVY53	727593	1886	1 - 330	11638		Pro-13 to His-21, Asn-34 to Asp-42, Trp-78 to Lys-89.	H0521: 2		
HDPVY58	710458	1887	3 - 152	11639		Leu-6 to Phe-13, Arg-23 to Leu-29, Ser-32 to His-38.	H0521: 3		
HDPWA55	965474	1888	169 - 354	11640		Glu-22 to Ser-28, Asn-45 to Ser-51.	H0591: 1 and H0521: 1.		
HDPWD25	677764	1889	75 - 275	11641		Glu-35 to Ser-40, Gly-55 to Pro-67.	H0521: 2		
HDPWE80	909916	1890	94 - 765	11642		Asp-8 to Cys-21, Val-25 to Asn-33, Thr-47 to Pro-55, Ala-62 to Thr-68, Val-79 to Lys-88, Asn-91 to Asn-104, Tyr-114 to Gly-120, Thr-187 to Glu-192, Ile-217 to Thr-224.	H0521: 9, L0595: 2, L0593: 1 and L0594: 1.		
HDPWE88	857980	1891	170 - 439	11643		Gln-1 to Met-9, Arg-39 to Lys-45, Lys-66 to Leu-75.	H0521: 2	8q22.2	148900, 216550

HDPWH10	967692	1892	2 - 175	11644	Thr-3 to Ser-11.	H0650: 1, H0318: 1 and H0521: 1.		
HDPWN34	703814	1893	294 - 446	11645	Ser-1 to Met-6, Lys-37 to Cys-43.	S0134: 1, L2250: 1, L0766: 1, H0521: 1 and H0543: 1.	5p13	108962, 120940, 217050, 217050, 217070, 245050, 600837, 600946, 600946, 600946
HDPWY46	915964	1894	140 - 475	11646		H0521: 2		
HDPXE68	852626	1895	134 - 421	11647	Ser-43 to Pro-48.	H0521: 2	19q13.4	134790, 191044, 600040, 600138
HDPXF52	726450	1896	34 - 156	11648	Ser-15 to Leu-21.	H0521: 2, L0772: 1, L0764: 1, L0794: 1 and L0805: 1.		
HDPXL59	615543	1897	46 - 402	11649	Arg-45 to Met-52, Glu-75 to Arg-87, Ala-96 to Ser-102, Arg-110 to Ser-116.	L0756: 2, L0731: 2, H0250: 1 and H0521: 1.		
HDPXL68	707532	1898	317 - 619	11650		H0457: 1, H0521: 1 and H0522: 1.		
HDPXP04	614895	1899	501 - 752	11651	Pro-6 to Leu-12, His-21 to Lys-26.	H0581: 1, H0457: 1, H0521: 1 and L0581: 1.		
HDPXU29	852638	1900	359 - 517	11652		H0521: 2		
HDPXW75	951320	1901	284 - 784	11653	Lys-4 to Ser-21.	AR089: 2, AR061: 1 S0278: 1, H0521: 1 and L0740: 1.		
HDPXX01	915914	1902	3 - 197	11654	Arg-19 to Ser-25, His-37 to Ala-42.	H0521: 2		
HDPXZ92	743429	1903	3 - 209	11655		H0556: 1 and H0521: 1.		
HDPYC51	919000	1904	241 - 2	11656		H0521: 2		
HDPYD58	726288	1905	4 - 267	11657	Ser-38 to Gly-43, Ser-66 to Ser-72.	H0521: 1 and H0543: 1.		
HDPYD92	791222	1906	2 - 214	11658	Val-3 to Glu-8, Gly-21 to His-39, Glu-47 to Ile-64.	H0521: 2		
HDPYE96	717598	1907	54 - 497	11659	Thr-16 to Tyr-22, Lys-49 to Ala-58, Thr-67 to Ala-73.	S0212: 1 and H0521: 1.		

HDPYF79	774272	1908	510 - 346	11660	Ala-105 to Arg-111.	S0002: 1 and H0521: 1.		
HDPYH79	886845	1909	3 - 107	11661	Ala-2 to Asp-18.	S0278: 1, H0416: 1, S0428: 1, H0521: 1 and L0749: 1.		
HDQDU40	791340	1910	186 - 458	11662	Arg-1 to Ile-7, Gln-9 to Glu-16.	H0521: 2		
HDQEA94	793378	1911	370 - 606	11663		H0521: 2 and H0264: 1.		
HDQEC77	771351	1912	2 - 550	11664	Arg-1 to Ala-8, Gln-11 to Ser-18, Lys-27 to Thr-34, Ser-40 to Pro-49, Ser-62 to Asn-67, Ser-70 to Phe-84, Arg-86 to Gly-107.	H0521: 2		
HDQEC82	779149	1913	316 - 483	11665	His-38 to Asn-44.	H0521: 2		
HDQEF04	927024	1914	140 - 457	11666	Thr-1 to Thr-9, Arg-43 to Ala-56.	H0521: 1 and S0308: 1.		
HDQEF89	786393	1915	228 - 392	11667	His-12 to Glu-19, Ala-48 to Ala-55.	H0271: 1, H0416: 1 and H0521: 1.		
HDQEU75	766698	1916	3 - 323	11668	Ser-91 to Ala-107.	H0650: 1, H0488: 1 and H0521: 1.		
HDQEN22	931041	1917	65 - 211	11669	Pro-23 to Lys-30.	H0581: 1 and H0521: 1.		
HDQES62	792766	1918	25 - 216	11670		H0521: 2 and H0445: 1.		
HDQET03	923015	1919	250 - 402	11671	Arg-3 to Arg-8.	H0521: 2		
HDQET24	805486	1920	275 - 559	11672		H0521: 2		
HDQEU26	959940	1921	274 - 423	11673		S0114: 1 and H0521: 1.		
HDQEU63	852614	1922	126 - 374	11674	Pro-14 to Leu-23, Pro-30 to Gly-44.	H0521: 2 and H0522: 1.	16q12-q13	114835, 132700, 172490, 600968
HDQEU92	973212	1923	142 - 279	11675	Ser-1 to Ala-6.	H0521: 3		
HDQFA01	924539	1924	508 - 702	11676		H0250: 4, H0423: 4, L0766: 3, H0657: 2, S0116: 1, H0369: 1, H0581: 1, H0488: 1, H0641: 1, L0792: 1, L0665: 1 and H0521: 1.		
HDQFC85	783797	1925	98 - 541	11677	Glu-29 to Cys-39, Pro-91 to Pro-96,	H0521: 2 and H0090: 1.		

HDQFK04	926758	1926	88 - 345	11678	Arg-109 to Thr-118.	H0635: 1 and H0521: 1.		
HDQFU11	966106	1927	2 - 331	11679	Gly-1 to Ala-15, Leu-37 to Lys-42, Ala-54 to Glu-69, Pro-76 to Gly-84.	H0521: 2		
HDQFW03	915968	1928	389 - 556	11680	Ile-12 to Gln-21.	H0521: 2		
HDQGB04	852577	1929	179 - 358	11681		L0143: 1, H0521: 1 and H0542: 1.		
HDQGC76	950734	1930	177 - 299	11682	Lys-17 to Arg-27.	H0521: 1 and H0445: 1.		
HDQGG01	974439	1931	3 - 215	11683		H0521: 3		
HDQGG63	875920	1932	99 - 395	11684		H0521: 2		
HDQGGK93	791744	1933	289 - 441	11685	Pro-24 to Pro-30.	H0521: 3, S0144: 1 and S0002: 1.		
HDQGGQ11	966100	1934	217 - 471	11686		H0521: 2		
HDQGR80	880654	1935	199 - 450	11687	Glu-53 to Lys-70, Gly-77 to Asn-84.	H0521: 2		
HDQGT70	909848	1936	2 - 448	11688	Gln-1 to Gln-10.	H0521: 5		
HDQHF10	963485	1937	273 - 1	11689		H0521: 2		
HDQHK04	926988	1938	241 - 540	11690	Ser-8 to Ser-16, His-56 to Phe-61.	L0745: 2, H0581: 1, L0527: 1, H0521: 1 and L0744: 1.		
HDQHM43	852556	1939	181 - 345	11691	Gly-19 to Gly-28.	H0521: 1 and H0436: 1.		
HDQHO04	926976	1940	6 - 104	11692		H0305: 1, H0589: 1 and H0521: 1.		
HDQHO07	852555	1941	133 - 321	11693		H0521: 2		
HDQHP44	811790	1942	2 - 430	11694	Phe-6 to Asn-14, Thr-73 to Ala-78, Pro-84 to Glu-90, Ala-94 to Gly-100, Gln-107 to Pro-116.	H0521: 2		
HDQHQ83	973129	1943	307 - 119	11695		H0521: 3		
HDQHT10	963481	1944	1 - 219	11696	Pro-8 to Ser-39, Cys-44 to Ser-50, Leu-66 to Cys-73.	H0521: 2		
HDQHZ10	961336	1945	2 - 349	11697	Gln-3 to Ile-17, Pro-24 to Gly-29,	H0521: 2, S0002: 1 and L0589: 1.		

						His-67 to Gly-73, Pro-81 to Lys-94.				
HDQHZ22	879416	1946	1 - 408	11698		Gly-1 to Gly-6, Asp-62 to Arg-68.			AR089: 7, AR061: 3 H0521: 2	
HDQIH19	974391	1947	421 - 266	11699					H0521: 3	
HDQLI11	966021	1948	34 - 348	11700					H0521: 2, H0421: 1 and L0659: 1.	
HDQMA71	926528	1949	432 - 590	11701					H0318: 1 and H0524: 1.	
HDQMD13	924108	1950	1 - 273	11702		Thr-1 to Pro-7, His-34 to Arg-40.			H0524: 10	
HDQMD14	783547	1951	3 - 209	11703		Arg-1 to Pro-8.			H0524: 10	
HDQPI83	780731	1952	135 - 326	11704					H0522: 2	
HDRAB68	752316	1953	83 - 169	11705					H0537: 3	
HDTAG28	765834	1954	36 - 173	11706					H0486: 1 and S0344: 1.	
HDTAQ55	728772	1955	88 - 264	11707		Arg-43 to Tyr-49.			H0159: 1 and H0486: 1.	
HDTAY23	973925	1956	79 - 366	11708		Pro-39 to Ser-47.			S0298: 1 and H0486: 1.	
	974565	9561	63 - 500	19313		Arg-46 to Leu-58.				
HDTBF27	683389	1957	531 - 656	11709		Lys-1 to Thr-10, Arg-28 to Gln-37.			H0580: 1, H0486: 1, L0803: 1, L0666: 1 and L0777: 1.	
HDTBL45	785534	1958	54 - 404	11710		Gly-5 to Cys-12, Glu-26 to Arg-52, Ala-90 to Pro-97, Ala-102 to Glu-107.			AR061: 3, AR089: 2 H0485: 1, H0486: 1 and H0457: 1.	
HDTBO48	945083	1959	3 - 491	11711					AR089: 38, AR061: 5 H0486: 2	
HDTBO74	765555	1960	82 - 234	11712		Ala-1 to Leu-13.			H0090: 2, H0486: 1, L0766: 1, L0743: 1, L0751: 1, L0777: 1 and H0422: 1.	
HDTBO94	869818	1961	2 - 301	11713		Leu-24 to Trp-42.			H0486: 1, H0521: 1, L0748: 1 and L0757: 1.	
HDTBQ20	886757	1962	187 - 471	11714		Pro-16 to Thr-26, Pro-31 to Thr-42.			H0486: 2	
HDTBQ34	703446	1963	1 - 138	11715		Glu-26 to His-33.			H0486: 2	
HDTBQ47	720298	1964	48 - 293	11716		Tyr-51 to Glu-56, Thr-76 to Ala-82.			H0486: 2 and L0662: 1.	
HDTBQ56	799840	1965	797 - 1024	11717					L0777: 10, H0486: 4,	

									L0666: 2, L0740: 2, L0646: 1, L0662: 1, L0766: 1, L0803: 1, L0633: 1, L0657: 1, L0532: 1, L0663: 1 and L0665: 1.			
HDTBQ80	775420	1966	256 - 369	11718					Leu-22 to Thr-38.	H0486: 2		
HDTBR15	660236	1967	11 - 193	11719						H0486: 2		
HDTBR50	846630	1968	130 - 342	11720					Ala-2 to Glu-7, Arg-50 to Glu-58.	AR089: 41, AR061: 4 H0486: 2		
HDTBV02	920008	1969	291 - 473	11721						H0486: 1 and H0477: 1.		
HDTBV18	893761	1970	379 - 239	11722						H0486: 1 and H0271: 1.		
HDTBW52	726060	1971	319 - 519	11723						H0486: 3 and H0521: 1.		
HDTBX47	719530	1972	107 - 229	11724						H0486: 2		
HDTBY88	934472	1973	3 - 464	11725					His-130 to Lys-140.	AR089: 8, AR061: 2 S0218: 1 and H0486: 1.		
HDTCC60	740350	1974	33 - 215	11726					Asp-14 to Gln-19.	H0306: 1 and H0486: 1.		
HDTDA45	799875	1975	355 - 636	11727					Ala-30 to Ser-53, Pro-60 to Gly-68.	L0748: 3, H0485: 1 and H0486: 1.		
HDTDC23	675331	1976	362 - 523	11728						H0486: 1 and H0521: 1.		
HDTDC53	916348	1977	105 - 233	11729					Thr-25 to Lys-43.	H0486: 2		
HDTDD49	799872	1978	261 - 443	11730						H0486: 1, L0663: 1 and H0436: 1.		
HDTDG42	713588	1979	333 - 205	11731					Tyr-1 to Lys-11, Ser-29 to Lys-43.	H0486: 1 and S0002: 1.		
HDTDG70	587730	1980	83 - 343	11732					Trp-34 to Ile-52, Pro-65 to Gln-70.	H0486: 1, L0766: 1 and H0521: 1.		
HDTDL88	868565	1981	62 - 310	11733					Cys-7 to Ser-15.	H0486: 1, H0318: 1 and L0750: 1.		
HDTDP37	571417	1982	214 - 351	11734					Asp-18 to Lys-26.	H0255: 2 and H0486: 1.		
HDTDT33	587773	1983	1 - 216	11735					Lys-42 to Ser-55.	H0305: 3 and H0486: 1.		
HDTET19	912765	1984	2 - 313	11736					Ser-42 to Asn-48, Ser-76 to Ser-89.	H0486: 1 and H0439: 1.	19q13.32-q13.33	134790, 152780, 152780, 600040
HDTET30	915445	1985	36 - 206	11737						H0486: 1 and H0522: 1.		
HDTEN69	650840	1986	1 - 240	11738						H0486: 1 and H0542: 1.		
HDTES50	964709	1987	3 - 395	11739						AR089: 1, AR061: 1 H0341: 1 and H0486: 1.		



HDTCF55	731397	1988	264 - 530	11740	Glu-15 to Gly-20.	H0255: 1 and H0486: 1.		
HDTFD13	835596	1989	36 - 443	11741		H0607: 2, L0745: 2 and H0486: 1.		
HDTFE23	675407	1990	22 - 312	11742	Pro-63 to Ser-69.	H0486: 1 and H0521: 1.		
HDTFI53	738221	1991	1 - 63	11743		H0486: 1 and H0543: 1.		
HDTFP51	924898	1992	2 - 325	11744	Asn-1 to Arg-6.	S0114: 1, H0486: 1 and H0423: 1.		
HDTFQ26	681234	1993	161 - 304	11745	Ser-9 to Arg-14.	L0803: 2, S0114: 1, H0486: 1, L0662: 1, L0754: 1 and L0747: 1.		
HDTGE59	893721	1994	79 - 186	11746		H0486: 2		
HDTGII5	953336	1995	164 - 349	11747	Val-1 to Cys-7, Lys-11 to Pro-18.	H0305: 1, H0486: 1 and L0804: 1.		
HDTGJ03	923452	1996	2 - 223	11748	Gly-19 to Phe-27, Lys-42 to Lys-53.	H0608: 1 and H0486: 1.		
HDTGJ64	799860	1997	62 - 142	11749	Arg-22 to Ser-27.	H0486: 2		
HDTGK27	682689	1998	2 - 112	11750	Glu-26 to Pro-31.	L0717: 1, H0486: 1 and H0421: 1.		
HDTGP34	855739	1999	273 - 431	11751	Lys-48 to Lys-53.	H0486: 1, H0063: 1 and L0743: 1.		
HDTGP93	724545	2000	54 - 197	11752	Asp-27 to Asp-40.	H0486: 1 and S0052: 1.		
HDTGW21	785047	2001	3 - 383	11753	Leu-9 to Ser-14.	H0486: 1 and H0069: 1.		
HDTGW52	726197	2002	1 - 114	11754		H0341: 1 and H0486: 1.		
HDTHA89	838813	2003	2 - 214	11755		H0486: 1 and H0521: 1.		
HDTHB41	711849	2004	170 - 334	11756		H0486: 1 and H0423: 1.		
HDTHE95	795180	2005	151 - 330	11757	Ile-24 to Thr-32, Tyr-42 to Arg-48.	H0486: 1, H0444: 1 and H0445: 1.		
HDTHK91	789790	2006	229 - 402	11758	Lys-20 to Pro-26, Gly-42 to Ser-47.	H0486: 1 and H0422: 1.		
HDTHM43	851854	2007	3 - 233	11759	Pro-1 to Gly-6.	H0486: 2		
HDTHO45	799861	2008	1 - 123	11760	Ser-28 to Cys-36.	H0486: 3		
HDTHQ15	923899	2009	1 - 612	11761	Arg-36 to Asp-42, Ala-55 to Lys-62, Ser-71 to Gly-81, Ala-87 to Ser-93.	L0766: 2, H0486: 1 and H0521: 1.		
HDTHQ55	799859	2010	1 - 198	11762	Gly-1 to Cys-8.	H0486: 2		

HDTHW16	799839	2011	329 - 571	11763	Val-28 to Leu-34.	H0486: 2			
HDTHZ46	957669	2012	119 - 370	11764	Pro-44 to Pro-49.	H0255: 1, H0486: 1 and L0748: 1.	22q11	104170, 104170, 104170, 115470, 142360, 188400, 188400, 217095, 600850, 601607	
HDTHB38	971665	2013	738 - 529	11765	Asn-18 to Asn-24.	H0486: 2			
HDTHC48	828038	2014	215 - 376	11766		H0486: 2			
HDTHC74	838780	2015	310 - 453	11767	Lys-1 to Lys-7, Thr-24 to Gly-32.	H0486: 2			
HDTHD61	908946	2016	332 - 547	11768	Glu-21 to Cys-29, Cys-43 to Thr-53, His-59 to Tyr-72.	AR089: 1, AR061: 0 H0486: 2			
HDTHF01	883070	2017	168 - 527	11769	Met-27 to Glu-34.	AR089: 57, AR061: 40 H0486: 2			
HDTHF90	787413	2018	2 - 259	11770	Cys-37 to Glu-43, Lys-58 to Lys-63, Glu-71 to Asp-78.	H0271: 2 and H0486: 1.			
HDTHG34	799851	2019	191 - 355	11771	Ser-22 to Arg-28, Glu-50 to Arg-55.	H0486: 3			
HDTHH43	935643	2020	260 - 550	11772	Leu-32 to Trp-38.	H0486: 1 and H0436: 1.			
HDTHM13	926952	2021	137 - 451	11773		H0486: 2			
HDTHR88	931122	2022	229 - 411	11774	Tyr-10 to Trp-16.	H0486: 3, L0803: 3, L0774: 2, L0772: 1, L0666: 1, L0740: 1 and L0731: 1.			
HDTHV22	883109	2023	31 - 411	11775	Asn-1 to His-12.	H0486: 2			
HDTHV37	799867	2024	2 - 232	11776	Tyr-14 to Asn-20.	H0486: 2			
HDTHV62	799835	2025	431 - 619	11777		H0486: 2			
HDTHW03	922928	2026	240 - 413	11778		H0486: 2			
HDTHX57	799828	2027	2 - 205	11779	Asn-1 to Glu-11, Glu-60 to Tyr-68.	H0486: 2			
HDTHY24	799854	2028	288 - 404	11780		H0486: 2			
HDTHY26	799855	2029	127 - 312	11781	Cys-2 to Lys-8.	H0486: 2			
HDTHY41	799853	2030	80 - 334	11782	Ser-73 to Lys-79.	H0486: 2 and L0766: 1.			
HDTHY69	799857	2031	71 - 388	11783	Glu-1 to Arg-7, Ser-14 to Gly-21.	H0486: 2			

HD/TI244	925574	2032	1 - 402	11784	Thr-62 to Tyr-68.	L0766: 3, H0486: 2, L0764: 2, H0657: 1, H0271: 1, L0794: 1, H0576: 1 and L0779: 1.		
HD/TJA54	799856	2033	15 - 77	11785		H0486: 2		
HD/TJC51	799850	2034	8 - 244	11786	Gln-1 to Lys-13, Ser-49 to Asp-55.	H0486: 3		
HD/TJI16	918631	2035	2 - 181	11787	Ser-21 to Gly-26.	H0486: 1, L0766: 1 and H0543: 1.		
HD/TJ37	799834	2036	311 - 553	11788	Glu-1 to Thr-6, Leu-34 to Ala-40.	AR089: 46, AR061: 7 H0486: 2, L0663: 1 and L0754: 1.		
HD/TJJ02	913787	2037	3 - 116	11789		AR089: 34, AR061: 11 H0486: 2		
HD/TJJ55	856558	2038	488 - 691	11790	Phe-2 to Gln-11, Arg-24 to His-34, Pro-50 to Val-63.	L0761: 3, L0779: 2, L0777: 2, H0486: 1, H0591: 1, S0426: 1, L0800: 1, S0053: 1 and L0759: 1.		
HD/TJK81	851897	2039	287 - 469	11791	Glu-8 to Ser-16.	H0486: 2		
HD/TJQ18	805597	2040	2 - 376	11792	Gly-21 to Cys-27, Gly-32 to Ser-47, Arg-60 to Gln-72, Ser-102 to Leu-107.	H0486: 2		
HD/TJT70	918563	2041	881 - 1108	11793		H0486: 2 and L0758: 2.		
HD/TJU06	934242	2042	175 - 291	11794	Lys-11 to Pro-26.	H0486: 2 and H0445: 1.		
HD/TKP88	799865	2043	349 - 525	11795		H0486: 2		
HD/TKQ14	886936	2044	1 - 555	11796	Ser-60 to Thr-71, Thr-82 to Leu-94, Gln-113 to Asp-123, Val-125 to Tyr-133, Leu-144 to Gly-149.	AR054: 60, AR051: 40, AR050: 36, AR089: 5, AR061: 2 H0521: 4, H0486: 2, S0002: 2, L0770: 2, L0769: 2, L0766: 2, L0518: 2, L0783: 2, L0777: 2, L0731: 2, H0422: 2, H0556: 1, H0583: 1, H0650: 1, H0657: 1,		

							H0179: 1, L0055: 1, H0488: 1, S0426: 1, L0662: 1, L0775: 1, L0655: 1, L0665: 1, S0053: 1, H0659: 1, L0754: 1, L0779: 1, L0759: 1 and H0543: 1.			
HDTKS28	885471	2045	217 - 525	11797	Asp-6 to Glu-11.		H0486: 2			
HDTKU06	934269	2046	81 - 260	11798	Ser-30 to Leu-38.		H0486: 2 and L0758: 1.			
HDTKX89	799829	2047	191 - 364	11799			H0486: 2			
HDTKZ74	799842	2048	449 - 610	11800	Thr-2 to Asn-7.		H0486: 2			
HDTLA08	958307	2049	3 - 278	11801	Ser-45 to Lys-53.		H0402: 2, H0486: 2 and L0776: 1.			
HDTLA53	851826	2050	3 - 170	11802	Arg-18 to Glu-24, Phe-27 to Gly-37.		H0486: 2			
HDTLB55	905872	2051	129 - 518	11803	Ala-15 to Asp-34, Met-43 to Ser-48, Gln-80 to Glu-94.		H0580: 1 and H0486: 1.			
HDTLD17	908601	2052	1 - 450	11804			AR089: 1, AR061: 0 H0486: 3			
HDTLH19	959932	2053	42 - 293	11805	Asn-5 to Lys-14, Ala-69 to Ser-74.		S0114: 1 and H0486: 1.			
HDTLK51	851846	2054	459 - 217	11806			H0486: 2			
HDTLN80	805562	2055	326 - 553	11807			H0486: 1 and H0521: 1.			
HDTLP72	799837	2056	3 - 161	11808			H0486: 2			
HDTLX24	799838	2057	1 - 306	11809	Gln-11 to Glu-17, Lys-44 to Gln-51, Glu-78 to Ser-83.		H0486: 2			
HDTMG55	959633	2058	394 - 507	11810	Glu-16 to Val-22.		H0255: 1 and H0486: 1.			
HDTMH14	799847	2059	163 - 456	11811	Pro-14 to Leu-29, Ile-66 to Ser-71.		H0486: 2			
HEIAA07	920257	2060	1 - 171	11812	Pro-17 to Glu-23, Ala-33 to Leu-40, Leu-48 to Lys-56.		S0140: 9 and H0179: 2.			
HEIAA38	907594	2061	191 - 337	11813	Arg-1 to Gly-6.		S0140: 3			
HEIAB13	677400	2062	65 - 238	11814	Pro-24 to Gly-34, Gly-49 to Tyr-54.		S0140: 2			

HEIAB27	683474	2063	3 - 326	11815		L0766: 2, S0212: 1 and S0140: 1.		
HEIAB68	721652	2064	1 - 81	11816	Lys-1 to Lys-14.	S0140: 2		
HEIAC83	920022	2065	52 - 132	11817		S0140: 2		
HEIAD05	932397	2066	53 - 307	11818	Val-2 to Ala-8, Lys-11 to Cys-17, Glu-28 to Gly-33.	S0140: 2		
HEIAE05	932390	2067	102 - 224	11819		S0140: 2		
HEIAE76	577254	2068	197 - 301	11820		S0140: 2		
HEIAG38	577308	2069	1 - 180	11821		S0053: 2, S0140: 1 and L0665: 1.		
HEIAH70	757174	2070	172 - 339	11822	Pro-7 to Asp-12, Lys-29 to Cys-36.	S0140: 2		
HEIAL53	466308	2071	82 - 330	11823	Tyr-3 to Val-26, Leu-41 to Ser-48.	S0140: 2		
HEIAO01	916438	2072	72 - 242	11824	Trp-1 to Asp-18, Glu-44 to Asn-57.	S0218: 1 and S0140: 1.		
HEIAO14	851197	2073	152 - 286	11825	Gly-38 to Ile-44.	S0140: 2		
HEIAO48	917281	2074	17 - 175	11826	Thr-48 to Gln-53.	S0140: 2 and T0002: 1.		
HEIAO51	725649	2075	85 - 222	11827	Met-8 to Thr-13.	S0140: 2		
HEIAT07	953574	2076	3 - 362	11828	Pro-18 to Lys-26.	S0140: 2		
HEIAT36	576598	2077	61 - 288	11829	Ala-2 to Ser-9, Lys-41 to Asp-50.	S0140: 2, L0769: 1 and L0790: 1.		
HEIAU68	753000	2078	223 - 110	11830		S0140: 2		
HEIAV20	523766	2079	129 - 233	11831		H0271: 2, S0140: 1 and H0179: 1.		
HEICC82	781171	2080	188 - 334	11832		S0140: 2		
HEOAB19	939448	2081	2 - 322	11833	Glu-17 to Ala-35.	H0581: 1 and H0439: 1.		
HEOAD29	690762	2082	68 - 277	11834	Glu-6 to Asn-13.	H0439: 1 and S0053: 1.		
HEOMC23	850094	2083	215 - 403	11835		H0457: 2		
HEOME43	967292	2084	151 - 1350	11836	Gly-1 to Arg-8.	H0255: 1 and H0457: 1.		
HEOMF61	573059	2085	2 - 202	11837	Arg-1 to Cys-8, Leu-42 to Val-52.	S0052: 2 and H0457: 1.		
HEOMG01	916672	2086	149 - 472	11838	Glu-44 to Ser-59, Cys-67 to Cys-72.	H0457: 3		

HEOMG04	922824	2087	3 - 77	11839	Asp-1 to Lys-6.	H0457: 2	
HEOMG16	933969	2088	64 - 360	11840	Asn-2 to Lys-9, Ala-77 to Trp-83.	H0457: 6	
HEOMG25	678190	2089	163 - 357	11841	Pro-16 to Glu-21.	H0457: 6, S0114: 2, H0556: 1 and S0222: 1.	
HEOMG32	699343	2090	139 - 423	11842		H0457: 7	
HEOMG48	963338	2091	3 - 242	11843	Pro-12 to Cys-19, Val-50 to Ser-56.	H0457: 4	
HEOMG78	920911	2092	1 - 330	11844		H0457: 2, H0264: 1, L0748: 1, L0754: 1 and L0593: 1.	
HEOMH04	854342	2093	461 - 667	11845		H0457: 9	
HEOMH31	951834	2094	376 - 603	11846		H0457: 4	5p15.2
HEOMH77	721342	2095	229 - 390	11847	Pro-11 to Arg-20.	H0457: 8, H0580: 1, H0013: 1, H0250: 1, H0635: 1 and L0766: 1.	123000, 602568
HEOMH89	787109	2096	3 - 347	11848	Asp-1 to Trp-10, Ala-13 to Pro-19, Asp-27 to Lys-45, Pro-47 to Cys-53, Thr-89 to Gly-97.	H0341: 1, H0581: 1 and H0457: 1.	
HEOMK83	918374	2097	225 - 494	11849	Gly-11 to Arg-16, Ser-23 to Trp-31.	H0457: 2 and H0581: 1.	
HEOML13	893874	2098	3 - 353	11850	Glu-9 to Trp-14, Pro-19 to Asp-25, Glu-32 to Glu-42, Gly-66 to Glu-71.	H0457: 3	
HEOML73	724043	2099	302 - 412	11851		H0457: 3	
HEOMM10	964736	2100	72 - 209	11852	Lys-5 to Thr-16.	H0457: 3	
HEOMN02	913819	2101	42 - 539	11853	Arg-3 to Glu-9, Met-30 to Gly-45, Ile-47 to Ile-68.	H0457: 5 and H0581: 1.	
HEOMO43	855659	2102	208 - 411	11854		H0457: 2	
HEOMO57	795128	2103	68 - 262	11855	Lys-9 to Ile-14, Lys-28 to Val-41.	H0457: 1 and H0444: 1.	
HEOMP31	698087	2104	178 - 378	11856	Gly-24 to Ser-30.	H0457: 1, H0521: 1, H0445: 1 and L0600: 1.	

HEOMP73	750609	2105	164 - 331	11857			H0457: 3		
HEOMQ17	851049	2106	173 - 478	11858	Ser-37 to Asp-45.		H0457: 2		
HEOMQ75	965882	2107	71 - 196	11859	Leu-16 to Leu-22, Glu-31 to Leu-40.		H0457: 2		
HEOMQ80	835599	2108	35 - 202	11860	Gly-1 to Asn-9.		H0457: 2		
HEOMR13	657317	2109	375 - 671	11861			H0457: 1 and H0445: 1.		
HEOMR57	575739	2110	115 - 204	11862			H0457: 2		
HEOMR92	963130	2111	207 - 365	11863	Ser-17 to Arg-30.		H0457: 2		
HEOMR96	855652	2112	202 - 432	11864	Asp-1 to Gly-8, Lys-11 to Trp-17, Gly-21 to Cys-44, Ser-70 to Arg-77.		H0457: 2		
HEOMS08	959581	2113	54 - 206	11865	Arg-34 to Val-42.		H0457: 2		
HEOMS65	969184	2114	281 - 487	11866	Ser-17 to Glu-22.		H0457: 3		
HEOMS85	662928	2115	1 - 414	11867			H0457: 1 and H0521: 1.		
HEOMS92	735720	2116	3 - 140	11868	Pro-3 to Pro-17, Pro-30 to Pro-42.		H0457: 2		
HEOMT38	850980	2117	2 - 427	11869	Arg-1 to Gln-9, Lys-36 to Glu-42.		H0457: 2		
HEOMT79	936687	2118	224 - 487	11870			H0457: 3		
HEOMU07	953475	2119	234 - 115	11871			H0457: 2		
HEOMU23	675971	2120	239 - 388	11872			H0457: 2, H0486: 1, H0264: 1, L0768: 1, L0666: 1, H0436: 1, L0754: 1, H0445: 1 and H0542: 1.		
HEOMU79	965900	2121	2 - 283	11873	Pro-36 to Pro-44, Thr-73 to Pro-90.		H0457: 4		
HEOMV11	847274	2122	3 - 296	11874	Asp-1 to Gly-19, Gln-49 to Gly-57, Asp-71 to Lys-86.		H0457: 3		
HEOMV16	958211	2123	234 - 464	11875	Gly-14 to Lys-24, Glu-34 to Ser-39.		H0457: 3 and L0438: 1.		
HEOMV54	866586	2124	293 - 418	11876	Ile-4 to Gln-15.		S0114: 1, H0457: 1 and L0518: 1.		
HEOMV81	915093	2125	328 - 504	11877			H0457: 2		
HEOMW26	418125	2126	2 - 250	11878	Pro-1 to Pro-7.		H0457: 1 and S0052: 1.		

HEOMW83	659808	2127	211 - 336	11879			H0457: 2		
HEOMX04	615337	2128	1 - 180	11880	Thr-12 to Ser-27, Gln-52 to Arg-60.		H0457: 2		
HEOMX61	958233	2129	256 - 435	11881			H0457: 5		
HEOMX65	575919	2130	3 - 206	11882			H0457: 2		
HEOMX92	919200	2131	132 - 434	11883	Ser-35 to Pro-43.		H0457: 5		
	961148	9562	41 - 244	19314	Lys-12 to Ser-19, Thr-35 to Met-40, Pro-43 to Tyr-48.				
HEONC06	855649	2132	119 - 322	11884	Lys-32 to Leu-44, Lys-62 to Cys-68.		H0457: 7		
HEOND75	918209	2133	2 - 304	11885			H0457: 4		
HEONJ79	506226	2134	118 - 300	11886			H0457: 2		
HEONK15	660365	2135	128 - 442	11887	Pro-9 to Ser-15, Ile-24 to Gly-29, Pro-41 to Arg-51.		H0457: 2	19q13.3	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 258501, 600040, 602225, 602225
HEONM30	692726	2136	136 - 270	11888	Leu-5 to Leu-22.		H0457: 2		
HEONM69	855638	2137	95 - 520	11889	Pro-53 to Asn-66, Pro-92 to Ser-98, Ser-106 to Gly-114.		H0457: 4	9q34.13	
HEONN28	745144	2138	133 - 291	11890	Thr-41 to Asn-53.		H0457: 2		
HEONO81	792074	2139	124 - 297	11891	Tyr-29 to Glu-35, Val-47 to Tyr-53.		H0486: 1 and H0457: 1.	1	
HEONP93	792377	2140	133 - 273	11892	Thr-39 to Phe-47.		H0457: 2 and L0740: 1.		
HEONQ08	959556	2141	247 - 528	11893	Ser-12 to Gly-20, Pro-50 to Leu-55.		H0457: 11 and L0543: 1.		
HEONQ19	930705	2142	3 - 806	11894	Ala-13 to Arg-20, Gln-35 to Lys-48.		AR089: 2, AR061: 0 H0457: 9, L0596: 3, L0803: 2, H0673: 1, L0455: 1, L0369: 1, L0764: 1, L0389: 1, L0375: 1, L0655: 1, L0809: 1, L0790: 1 and L0752: 1.		



HEONQ58	965881	2143	315 - 518	11895	Ile-1 to Lys-9.	H0457: 8, H0656: 1 and L0366: 1.		
HEONQ65	967588	2144	3 - 353	11896	Leu-11 to Gly-16.	H0457: 3, S0212: 1 and H0069: 1.		
HEONQ69	556544	2145	2 - 340	11897		H0457: 3, H0264: 2 and H0656: 1.		
HEONU26	577429	2146	3 - 161	11898		S0116: 1, H0457: 1 and H0521: 1.		
HEONU75	851054	2147	1 - 228	11899	Thr-2 to Asn-8, Ser-15 to Pro-27.	H0457: 2		
HEONV59	949152	2148	1 - 279	11900	Ala-3 to Gly-10.	AR061: 0, AR089: 0 H0457: 1 and H0521: 1.		
HEONW15	575812	2149	237 - 392	11901	Phe-9 to Glu-20, Leu-30 to Arg-45.	H0457: 3		
HEONX19	668740	2150	2 - 151	11902	Thr-1 to Ser-6.	L0766: 5, H0402: 1, H0457: 1 and L0779: 1.		
HEONX49	485897	2151	183 - 494	11903	Glu-29 to Leu-34, Asn-36 to His-41, His-45 to Pro-55.	H0457: 2 and H0556: 1.		
	851020	9563	106 - 204	19315				
	851021	9564	582 - 869	19316				
	830013	2152	301 - 375	11904		H0457: 4		
HEO0B36	923505	2153	90 - 314	11905	Pro-6 to Trp-11, Phe-21 to Asp-26.	H0457: 3		
HEOD59	738991	2154	1 - 213	11906	Pro-21 to Phe-32.	H0457: 2		
HEOOV40	710800	2155	210 - 371	11907		H0457: 3 and H0318: 2.		
HEOPE28	926837	2156	3 - 314	11908	Pro-1 to Lys-21, Lys-28 to Lys-37, Gly-65 to Pro-70, Arg-81 to Asp-86.	H0457: 8	16	
HEOPE58	851009	2157	257 - 421	11909	Phe-28 to Val-36, Phe-44 to Pro-49.	AR089: 1, AR061: 0 H0457: 4		
HEOPF03	839868	2158	189 - 377	11910		H0457: 3		
HEOPF18	918405	2159	2 - 310	11911	Val-6 to Tyr-11, Thr-14 to Asn-19, Thr-41 to Arg-50.	H0457: 2		

HEOPF25	934171	2160	127 - 522	11912	Gln-62 to Ile-69, Glu-84 to Trp-89, Thr-93 to Pro-98.	H0457: 6		
HEOPF33	969695	2161	22 - 342	11913	Thr-13 to Gly-27, Arg-60 to Gly-69, Gly-98 to Trp-106.	H0457: 6, L0766: 1 and L0789: 1.		
HEOPF56	850925	2162	372 - 599	11914	Gln-53 to Trp-58, Ala-66 to Gly-74, Gln-98 to Glu-103.	H0457: 6 and L0036: 1.		
HEOPG01	915047	2163	3 - 254	11915	Ser-23 to Ala-32, Pro-57 to Ser-63.	H0457: 5		
HEOPI69	883161	2164	142 - 594	11916	Ser-23 to Glu-34, Glu-48 to Gly-55.	H0457: 5		
HEOPI73	850936	2165	316 - 540	11917	Gly-7 to Thr-13, Pro-78 to Phe-85.	H0457: 5		
HEOPI41	855634	2166	300 - 473	11918	Ala-1 to Met-6, Arg-15 to Pro-20, Phe-47 to Gly-53.	H0457: 5		
HEOPK43	930942	2167	92 - 304	11919	Ser-6 to Ala-12.	H0457: 4		
HEOPK47	966327	2168	366 - 500	11920	Pro-27 to His-34, Arg-40 to Ser-48.	H0457: 1 and S0053: 1.		
HEOPK52	883170	2169	66 - 356	11921		H0457: 4		
HEOPK90	850883	2170	223 - 576	11922	Lys-36 to Met-47, Pro-62 to Trp-73, Gly-75 to Gly-81.	H0457: 9 and S0114: 2.		
HEOPN73	851002	2171	172 - 276	11923	Glu-1 to Lys-12, Ser-24 to Gln-35.	H0457: 2 and H0069: 1.		
HEOPN78	918205	2172	85 - 327	11924	Pro-6 to Arg-17, Ser-42 to Ser-56.	H0457: 4		
HEOPN95	973440	2173	185 - 454	11925	Leu-1 to Glu-6, Asn-28 to Gly-38, Ser-42 to Pro-47.	H0457: 4 and H0423: 1.		
HEOPO08	958184	2174	2 - 226	11926		H0457: 4		
HEOPP30	850916	2175	68 - 334	11927	Glu-23 to Asn-31, Ser-37 to Ala-43.	H0457: 8		

HEOPQ06	934147	2176	163 - 516	11928	Phe-77 to Trp-89. Pro-21 to Cys-30, Ser-44 to Pro-49, Pro-65 to Ser-70, Cys-74 to Gly-85, Lys-98 to Gln-103.	H0457: 4		
HEOPW04	850948	2177	393 - 596	11929		H0457: 3		
HEOPW38	926764	2178	3 - 242	11930	Val-7 to Ser-26, Gln-43 to Arg-49, Lys-69 to Lys-76.	H0457: 3		
HEOPW67	840050	2179	212 - 367	11931	Glu-1 to Lys-14.	H0457: 2		
HEOPX85	855625	2180	1 - 201	11932	Thr-56 to Asp-62.	H0457: 2		
HEOPY05	918438	2181	294 - 434	11933		H0457: 7		
HEOPZ02	918407	2182	290 - 505	11934	Thr-42 to Ser-47.	H0457: 5		
HEOPZ05	928257	2183	22 - 144	11935		H0457: 2		
HEOPZ11	965970	2184	232 - 453	11936	Thr-2 to Cys-15, Arg-34 to Thr-39.	H0457: 3		
HEOPZ29	878503	2185	2 - 394	11937	Arg-1 to Gly-8, Ser-52 to Gly-59.	H0457: 3		
HBOQB30	909899	2186	175 - 423	11938	Glu-32 to Ser-41, Met-51 to Leu-65, Met-76 to Ala-83.	H0457: 3 and S0002: 1.		
HEOQC10	963398	2187	59 - 217	11939	Gln-40 to Leu-47.	H0457: 4		
HEOQC64	850981	2188	1 - 153	11940	Ser-32 to Ala-38.	H0457: 2 and L0060: 1.		
HEOQC76	909032	2189	106 - 657	11941	Ala-10 to Tyr-22, Phe-31 to Leu-37, Ser-59 to Leu-64, Tyr-70 to Lys-90.	AR089: 1, AR061: 1 H0457: 3 and L0766: 2.		
HEOQE04	922876	2190	87 - 260	11942		H0457: 3 and H0069: 1.		
HEOQF77	850974	2191	213 - 416	11943		H0457: 3		
HEOQG73	958109	2192	2 - 208	11944	His-1 to Thr-12.	H0457: 4 and L0748: 1.		
HEOQG80	850971	2193	263 - 451	11945		H0457: 2		
HEOQH81	934100	2194	371 - 568	11946		H0457: 6		
HEOQI11	965973	2195	396 - 599	11947		H0457: 4		
HEOQJ11	879559	2196	125 - 472	11948	Arg-52 to Thr-61, Thr-80 to Ala-88.	H0457: 3		

HOOQK70	934370	2197	1 - 297	11949			H0457: 4		
HOOQK72	847285	2198	2 - 160	11950			H0457: 3		
HOOQM83	850964	2199	71 - 601	11951	Arg-1 to Trp-6, Ala-8 to Pro-17, Pro-24 to Trp-41, Pro-46 to Cys-58, Pro-120 to Pro-127.		H0457: 2	3p21.1	150250, 164500, 168468, 182280, 238310, 600163, 601226, 601916
HOOQN06	934202	2200	479 - 772	11952			H0457: 9 and L0366: 1.		
HOOQN15	864110	2201	191 - 30	11953	Lys-1 to Met-17, Pro-26 to Trp-35.		H0318: 1 and H0457: 1.		
HOOQN87	850957	2202	146 - 406	11954	Lys-7 to Lys-15.		H0457: 2 and H0591: 1.		
HOOQP44	942596	2203	157 - 1026	11955	Phe-62 to Arg-67, Gln-92 to Leu-104, Arg-163 to Leu-171, Ile-175 to Thr-182, Ser-237 to Ser-244, Ala-270 to Arg-277.		AR089: 1, AR061: 0 H0457: 2		
HOOQS11	965930	2204	167 - 322	11956	Phe-26 to Asp-33, Ala-42 to Leu-49.		H0457: 5		
HOOQT57	850931	2205	469 - 657	11957	His-7 to Pro-18.		H0457: 6		
HOOQT76	850932	2206	216 - 671	11958	Gly-98 to Pro-104, Phe-122 to Pro-128.		H0457: 2		
HOOQW56	883227	2207	35 - 226	11959			H0457: 2		
HOOQW81	887147	2208	580 - 2	11960	Pro-51 to Gly-58, Arg-78 to Tyr-87, Asp-161 to Ala-166, Pro-187 to Gly-193.		AR050: 124, AR054: 107, AR051: 92 H0457: 5		
HEORC12	969585	2209	73 - 249	11961	Gly-1 to Asn-7.		H0457: 1 and H0422: 1.		
HEORC48	922885	2210	541 - 801	11962			H0457: 3 and L0748: 3.		
HEORE11	965904	2211	571 - 759	11963			H0457: 3 and L0748: 1.		
HEORE22	969579	2212	583 - 699	11964	Thr-10 to Gln-16.		H0457: 12		
HEORE27	850902	2213	106 - 288	11965	Pro-17 to Lys-23, Lys-30 to Gly-46.		H0457: 6 and H0581: 1.		
HEORE79	959572	2214	89 - 295	11966	Thr-8 to Pro-17, Leu-29 to Asp-41, Ser-47 to Glu-55.		H0457: 6		

HEORF12	969580	2215	360 - 497	11967	Glu-5 to Gly-15, Cys-21 to Gln-26, Asn-38 to His-44.	H0457: 3		
HEORH20	934067	2216	3 - 140	11968		H0457: 5		
HEORJ90	918166	2217	159 - 263	11969		H0457: 2		
HEORK01	914988	2218	20 - 169	11970		H0457: 2		
HEORM10	963194	2219	3 - 362	11971	Pro-11 to Ile-17.	H0457: 2		
HEORM21	839142	2220	180 - 434	11972	Ser-20 to Thr-31, Arg-33 to Gly-40, Cys-42 to Leu-50, Phe-54 to Arg-63.	H0457: 2	3q25.1-q25.2	222900, 601402
HEORR01	915015	2221	396 - 130	11973	Lys-19 to Ser-24, Ala-46 to Asn-51, Thr-63 to Trp-72.	H0457: 3 and L0749: 1.		
HEORU06	934097	2222	14 - 430	11974	Pro-4 to Gly-10.	H0457: 3		
HEOSI66	850917	2223	287 - 409	11975		H0457: 4		
HEOSJ50	922825	2224	25 - 213	11976		H0457: 2		
HEOSL01	914874	2225	272 - 544	11977	Ser-27 to Gly-32, Ser-47 to Trp-59.	H0457: 7		
HEOSL08	850951	2226	1 - 240	11978		H0457: 2		
HEOSL54	926849	2227	503 - 652	11979		H0457: 7		
HEOSN60	841869	2228	114 - 374	11980	Gly-3 to Asp-9, Ala-15 to Pro-26, Leu-80 to Thr-86.	H0457: 3 and H0580: 1.		
HEOSO01	855651	2229	10 - 315	11981	Pro-31 to Pro-39, Pro-53 to Ile-65, Phe-69 to Glu-80, Pro-97 to Ser-102.	H0457: 3 and H0486: 1.		
HEOSF05	928270	2230	2 - 199	11982	Arg-8 to Ile-20.	H0457: 2		
HEOSF06	933991	2231	70 - 348	11983	Ala-11 to Gln-29, Arg-67 to Ala-72, Pro-77 to Gly-86.	H0457: 2		
HEOSR54	855615	2232	2 - 316	11984	Pro-2 to Ser-7.	H0457: 2, H0271: 1 and H0423: 1.		
HEOSS04	926483	2233	2 - 178	11985		H0457: 2		
HEOST23	965916	2234	296 - 532	11986	Gln-31 to Ser-36,	H0457: 5		

HFSAC03	850146	2235	234 - 443	11987	Gln-54 to Gly-79.	H0445: 3, H0306: 2, S0053: 2, H0057: 1, H0179: 1, S0314: 1, L0667: 1, S0428: 1, H0436: 1 and L0599: 1.		
	960974	9565	161 - 3	19317	Ser-45 to Lys-53.			
HFSAM43	715700	2236	41 - 175	11988	Gly-9 to Glu-15.	H0057: 1 and H0445: 1.		
HFSAQ59	572813	2237	137 - 3	11989	His-1 to Ala-6, Ser-29 to Ser-44.	H0402: 2, H0057: 1 and H0436: 1.		
HFSAV59	675922	2238	11 - 163	11990		H0402: 1, H0057: 1, L0527: 1, L0809: 1 and H0445: 1.		
HFSAX51	572815	2239	413 - 267	11991		H0402: 1, H0057: 1 and L0754: 1.		
HFSBF09	573315	2240	154 - 387	11992	Pro-14 to Leu-21.	H0057: 1 and S0052: 1.		
HFSBG31	504368	2241	3 - 110	11993	Val-16 to Glu-25, Thr-31 to Gly-36.	H0057: 2		
HHEAA27	575258	2242	112 - 297	11994		H0271: 1 and H0542: 1.		
HHEAM44	726856	2243	40 - 279	11995	Ala-1 to His-10.	L0717: 1, H0521: 1, H0542: 1 and H0543: 1.		
	970602	9566	503 - 799	19318	Gly-8 to Asn-13.			
HHEAW46	718120	2244	2 - 352	11996	His-3 to Pro-11, Pro-36 to Ala-45, Pro-82 to Leu-91, Arg-104 to Trp-114.	H0542: 2, L0637: 1 and L0754: 1.		
HHEBS24	858417	2245	57 - 320	11997		H0542: 2		
HHECK11	924982	2246	47 - 235	11998	Pro-29 to Met-35, Glu-48 to His-55.	H0069: 1 and H0542: 1.		
HHECK33	871375	2247	1 - 213	11999		H0542: 2		
HHECM01	916178	2248	117 - 386	12000		S0114: 1 and H0542: 1.		
HHECM66	781893	2249	181 - 321	12001		S0002: 1, L0748: 1 and H0542: 1.		
HHECO01	915285	2250	3 - 323	12002		H0542: 2	17	
HHECR08	959125	2251	327 - 557	12003	Leu-33 to Pro-42, Ser-64 to Phe-77.	L0764: 3, H0255: 1 and H0542: 1.		
HHECT58	973110	2252	126 - 254	12004		H0542: 3		
HHECT59	858407	2253	115 - 468	12005		H0488: 1 and H0542: 1.		

HHECT70	753842	2254	29 - 160	12006	Lys-27 to Thr-35.	T0042: 1 and H0542: 1.		
HHECX82	915913	2255	2 - 457	12007		H0521: 4, H0522: 1, H0542: 1 and H0543: 1.		
HHEDB31	697806	2256	391 - 591	12008		H0255: 1 and H0542: 1.		
HHEDH57	665762	2257	231 - 413	12009	Ala-24 to Lys-32, Pro-42 to Gln-50.	L0750: 1, S0308: 1 and H0542: 1.		
HHEDJ94	906876	2258	155 - 337	12010	Asn-39 to Gln-47.	H0641: 1 and H0542: 1.		
HHEDM03	923908	2259	203 - 373	12011	Arg-7 to Asn-40.	H0542: 2		
HHEDN93	731067	2260	1 - 171	12012	Cys-12 to Leu-17.	T0002: 1 and H0542: 1.	19q13.4	134790, 191044, 600040, 600138
HHEDO53	973320	2261	2 - 58	12013		H0542: 2, H0543: 2 and H0551: 1.		
HHEDO74	463250	2262	228 - 401	12014		L0779: 3, H0542: 2, L0662: 1, L0766: 1, L0774: 1, L0776: 1 and H0423: 1.		
HHEDP88	878759	2263	3 - 332	12015	Arg-7 to Phe-15.	H0542: 2		
HHEDR27	791847	2264	1 - 459	12016	Pro-38 to Lys-46, Pro-68 to Pro-73, Leu-85 to Trp-126, Gln-147 to Thr-153.	H0069: 2 and H0542: 1.	2q13	129490, 167415, 176860, 176860, 256100
HHEDW03	923340	2265	3 - 422	12017	Lys-27 to Gly-42, Gly-67 to Gly-73, Pro-80 to Thr-105.	H0543: 2 and H0542: 1.		
HHEDW58	735609	2266	289 - 522	12018	Leu-1 to Phe-6, Leu-23 to Asp-33, Pro-35 to Arg-52.	H0486: 1 and H0542: 1.		
HHEEC07	952455	2267	1196 - 1912	12019	Pro-72 to Pro-86, Arg-92 to Val-97, Met-152 to Pro-161, Leu-164 to Arg-172, Gly-205 to Tyr-227, Leu-229 to Asn-239.	H0542: 2		
HHEEC61	741280	2268	24 - 149	12020		H0542: 2		
HHEEK88	702337	2269	62 - 244	12021		L0804: 3, L0662: 2, L0752: 2, L0757: 2, L0758: 2, H0542: 2, L0481: 1, L0021:		

HHEEL47	719825	2270	276 - 425	12022	Glu-1 to Ile-15.	1, L0794: 1, L0774: 1, L0775: 1, L0652: 1, L0655: 1, L0659: 1, L0790: 1 and H0576: 1.		
HHEFB29	690073	2271	241 - 399	12023		L0805: 2, H0542: 2, L0776: 1, L0787: 1 and L0779: 1.		
HHEFB73	947568	2272	155 - 316	12024	Gln-15 to Tyr-24.	H0445: 1 and H0542: 1.		
HHEFK12	966292	2273	82 - 273	12025	Lys-1 to Asn-13.	H0580: 1 and H0542: 1.		
HHEFL47	973094	2274	2 - 256	12026	Ala-20 to Ala-25, Asn-60 to Trp-65.	H0542: 2		
HHEFZ58	735615	2275	2 - 223	12027	Arg-23 to Thr-28, Pro-38 to Ala-43, Met-66 to Cys-71.	H0542: 3		
HHEGA66	969467	2276	26 - 124	12028	Asp-1 to Arg-9, Glu-14 to Gln-28.	H0542: 2, L0769: 1 and L0747: 1.		
HHEHC74	974406	2277	448 - 666	12029		H0542: 2		
HHEHD94	964103	2278	1 - 318	12030	Gly-8 to Arg-14, Gly-21 to Glu-34, Ser-39 to Ser-44.	H0542: 3 and H0521: 1.		
HHEHU73	923895	2279	61 - 279	12031	Met-22 to Trp-27.	H0542: 2	13q12	121011, 121011, 129500, 253700, 601885, 602221
HHEHW78	973140	2280	161 - 592	12032		AR089: 64, AR061: 15 H0542: 2		
HHEJH19	973230	2281	3 - 293	12033	Arg-5 to Gly-15, Pro-42 to Pro-47, Lys-58 to Pro-63.	H0542: 2 and H0556: 1. H0542: 3		
HHEJH30	961974	2282	154 - 438	12034		H0542: 2		
HHEJY91	974407	2283	113 - 328	12035	Thr-42 to Gln-53.	H0542: 2		
HHEKG10	961957	2284	189 - 347	12036		H0542: 2		
HHEKJ20	918032	2285	96 - 227	12037	Val-1 to Gly-6, Arg-18 to Lys-40.	H0542: 2		
HHEKJ27	858384	2286	204 - 449	12038		H0542: 2		
HHEKK06	933849	2287	92 - 250	12039	Ser-31 to Arg-38.	H0542: 2		
HHEKP61	913413	2288	1 - 273	12040		AR054: 2, AR051: 2, AR050: 1 H0542: 2 and L0749: 1.		



HHEKS53	973233	2289	177 - 461	12041	Ser-22 to Ala-29, Ile-32 to Thr-38, Gln-51 to Arg-59.	H0542: 4		
HHELD03	868495	2290	383 - 640	12042		H0581: 1 and H0542: 1.		
HHELD11	974419	2291	3 - 152	12043	Lys-1 to Asn-13, Gln-33 to Pro-39, Gln-44 to His-50.	H0542: 3		
HHEMA34	704035	2292	77 - 367	12044	Thr-1 to His-6, Pro-58 to Asn-65.	H0265: 1 and H0543: 1.		
HHEMA65	719229	2293	5 - 136	12045		S0116: 1 and H0543: 1.		
HHEMD28	858303	2294	15 - 158	12046	Asn-9 to Gly-23, Gly-41 to Ser-48.	H0436: 1 and H0543: 1.		
HHEMK21	670784	2295	1 - 276	12047	Arg-8 to Pro-17, Asp-36 to Asn-49.	H0543: 2		
HHEMN76	752947	2296	301 - 450	12048		H0543: 2		
HHEMO91	790100	2297	150 - 269	12049		H0543: 2		
HHEMQ56	858289	2298	30 - 314	12050	Gly-20 to Thr-51.	H0543: 2		
HHEMQ58	952989	2299	38 - 295	12051	Gly-1 to Gly-13, Ile-35 to Leu-40.	H0521: 1 and H0543: 1.		
HHENC18	666335	2300	2 - 118	12052		S0134: 1 and H0543: 1.		
HHEND28	468911	2301	173 - 451	12053		H0179: 1 and H0543: 1.		
HHEND45	919630	2302	1 - 195	12054	Gly-1 to Lys-7.	AR089: 4, AR061: 2 H0543: 2		
HHENE18	806606	2303	63 - 425	12055	Thr-37 to Asp-45.	S0278: 1, H0543: 1 and H0423: 1.		
HHENE38	662972	2304	3 - 164	12056		H0543: 2 and S0053: 1.		
HHENE47	720255	2305	114 - 350	12057		H0423: 2, H0254: 1, H0250: 1 and H0543: 1.		
HHENG31	917904	2306	225 - 524	12058	Pro-1 to Phe-6, Pro-31 to Ser-37, Cys-85 to Asn-90.	L0740: 3, H0657: 2, H0421: 1, L0761: 1, L0662: 1, L0766: 1, L0776: 1, L0512: 1, L0748: 1, L0750: 1, L0758: 1 and H0543: 1.		
HHENH93	691023	2307	8 - 391	12059	Thr-1 to Gly-6, Pro-13 to Trp-23, Pro-51 to Trp-65.	H0521: 1 and H0543: 1.		

HHENO53	709078	2308	301 - 164	12060	Pro-5 to Lys-21.	H0543: 2		
HHENQ16	661841	2309	337 - 561	12061		H0543: 2		
HHENR11	966906	2310	596 - 832	12062	Val-15 to Lys-24.	H0069: 1 and H0543: 1.		
HHENR78	773537	2311	334 - 188	12063	Lys-1 to Arg-7, Ser-16 to Phe-21.	H0087: 1 and H0543: 1.		
HHENV38	657383	2312	3 - 386	12064	Arg-1 to Phe-20, Ser-46 to Pro-57, Lys-63 to Arg-75, Leu-77 to Ala-84, Arg-102 to Trp-117.	L0794: 4, L0803: 4, L0513: 2, H0637: 1, H0063: 1, L0761: 1, L0768: 1, L0809: 1, L0790: 1, L0777: 1 and H0543: 1.		
HHENZ86	670837	2313	81 - 269	12065	Cys-18 to Ser-26.	H0521: 1 and H0543: 1.		
HHEOF20	861457	2314	2 - 145	12066		H0543: 2		
HHEOF58	841978	2315	195 - 374	12067	Ser-15 to Gln-28, Ser-34 to Arg-41, Ser-47 to Phe-60.	H0543: 2 and H0444: 1.		
HHEOG17	662948	2316	2 - 205	12068	Gly-1 to Ser-9, Gly-43 to Gly-53.	H0264: 1, S0428: 1 and H0543: 1.		
HHEOG67	588154	2317	12 - 158	12069	Lys-7 to Pro-15, Leu-30 to Ala-37.	H0543: 2		
HHEOI18	677891	2318	3 - 395	12070	Glu-1 to Arg-8.	H0543: 2		
HHEOJ10	911814	2319	2 - 463	12071	Met-64 to Leu-75, Met-78 to Tyr-89.	H0543: 2		
HHEOL59	588168	2320	1 - 165	12072		H0543: 2		
HHEOX60	734311	2321	212 - 412	12073	Thr-11 to Pro-17, Gln-25 to Phe-31, Gly-35 to Leu-44.	H0543: 2		
HHEOZ17	793087	2322	13 - 153	12074		H0421: 1, H0521: 1 and H0543: 1.		
HHEPD46	718950	2323	246 - 437	12075	Arg-9 to Val-14, Asn-23 to Lys-30, Gly-47 to Trp-52.	H0063: 1, L0794: 1, H0445: 1 and H0543: 1.		
HHEPD73	966828	2324	3 - 290	12076	Pro-19 to Thr-35, Gly-87 to Trp-94.	H0543: 2 and L0657: 1.		
HHPEF31	858269	2325	70 - 333	12077	Arg-26 to Trp-32.	H0581: 1 and H0543: 1.		
HHPEG15	659664	2326	3 - 449	12078	Gly-40 to Ser-55, Arg-74 to Ser-82.	H0457: 1 and H0543: 1.		

					Ser-107 to Val-118, Lys-140 to Lys-145.				
HHEPK28	686489	2327	170 - 277	12079	Glu-1 to Lys-6.			H0445: 1 and H0543: 1.	
HHEPM73	683270	2328	103 - 204	12080	His-9 to Tyr-17.			H0543: 2, S0218: 1 and L0763: 1.	
HHEPN44	716494	2329	525 - 761	12081	Pro-9 to Pro-18, Val-32 to Asn-43.			H0637: 1, L0748: 1, H0445: 1 and H0543: 1.	
HHEPR14	869381	2330	376 - 612	12082				H0556: 1, L0749: 1 and H0543: 1.	
HHEPS91	493744	2331	446 - 270	12083				S0002: 2, H0457: 1, S0426: 1, L0438: 1 and H0543: 1.	
	934138	9567	545 - 826	19319					
HHEPZ10	963715	2332	169 - 2	12084				H0543: 2	
HHEQB17	918056	2333	209 - 370	12085				H0543: 2	
HHEQB47	841899	2334	364 - 477	12086	His-1 to Leu-9.			H0556: 1 and H0543: 1.	
HHEQG21	934680	2335	199 - 351	12087				H0543: 2	
HHEQG45	717303	2336	139 - 279	12088				H0543: 2	
HHEQG52	956214	2337	174 - 64	12089	Lys-1 to Gly-9, Asn-12 to Met-22.			H0543: 2	
HHEQG72	922619	2338	3 - 167	12090	Gly-30 to Asn-40.			H0543: 2	
HHEQG75	766960	2339	158 - 361	12091	Pro-48 to Pro-54.			H0543: 2	
HHEQG86	784752	2340	98 - 346	12092				H0543: 2	
HHEQH63	744596	2341	187 - 351	12093	Lys-8 to Ala-15.			H0543: 2	
HHEQI07	952416	2342	77 - 205	12094	Pro-37 to Lys-43.			H0543: 2	
HHEQI11	966293	2343	98 - 211	12095	Ser-12 to Asn-17.			S0116: 1, H0090: 1, L0748: 1, H0543: 1 and H0423: 1.	
HHEQI82	728596	2344	164 - 382	12096	Gly-41 to Gly-49.			H0306: 1 and H0543: 1.	
HHEQI89	786607	2345	23 - 172	12097				H0543: 2	
HHEQK01	871911	2346	64 - 249	12098				AR089: 7, AR061: 1 L0589: 1, H0542: 1 and H0543: 1.	
HHEQQ36	707926	2347	37 - 186	12099				H0543: 2	
HHEQP38	709076	2348	158 - 313	12100	Pro-15 to His-24.			H0543: 2	
HHEQP83	780397	2349	170 - 352	12101	Arg-31 to Gly-38.			S0114: 1 and H0543: 1.	
HHEQQ47	699160	2350	119 - 244	12102	Thr-1 to Leu-8,			H0543: 2	

HHEQS17	662203	2351	226 - 513	12103	Pro-23 to Cys-33.				
HHEQU09	755007	2352	271 - 465	12104	Pro-10 to Lys-19, Met-77 to Gln-82.	H0265: 1, S0134: 1 and H0543: 1.			
HHEQV03	923324	2353	252 - 425	12105	Gln-50 to Phe-58.	H0543: 2 and L0002: 1.			
HHEQV39	932851	2354	1 - 711	12106	Leu-7 to Phe-27, Gln-50 to Gln-57.	AR089: 3, AR061: 1 T0042: 1, H0543: 1 and H0422: 1.			
HHEQX60	915561	2355	2 - 400	12107	Ser-61 to Phe-67, Pro-85 to Gln-90.	H0543: 2			
HHEQY32	698633	2356	79 - 234	12108	Gly-19 to Arg-24, Ser-32 to Ala-41.	T0002: 1 and H0543: 1.			
HHERA17	858239	2357	30 - 269	12109	Pro-18 to Trp-27, Pro-48 to Ser-58, Ile-60 to Gln-77.	S0114: 1, H0650: 1, H0254: 1, H0255: 1, H0264: 1 and H0543: 1.			
HHERB03	933271	2358	226 - 432	12110	Pro-11 to Gln-16.	H0543: 3			
HHERB04	854112	2359	342 - 914	12111	Thr-30 to Leu-46, Leu-64 to Ser-73, Asp-107 to Thr-141, Ala-150 to Phe-162, Phe-165 to Ser-173, Ser-182 to Glu-191.	H0591: 1 and H0543: 1.	17		
HHERN11	966003	2360	2 - 118	12112	Arg-4 to Gly-16, Phe-24 to Asn-37.	H0543: 2			
HHERO39	858238	2361	171 - 368	12113	Arg-4 to Leu-10.	H0543: 2			
HHERO95	928142	2362	1038 - 1301	12114	Lys-8 to Val-14.	L0766: 5, L0759: 2, H0422: 2, H0650: 1, T0041: 1, L0794: 1, L0659: 1, L0779: 1, L0780: 1, H0543: 1 and H0423: 1.			
HHERQ04	925697	2363	168 - 302	12115	Lys-6 to Ser-11, Thr-38 to Lys-45.	H0543: 2			
HHERQ50	858049	2364	1 - 507	12116		H0090: 1, L0777: 1, L0731: 1, L0758: 1 and H0543: 1.			
HHERU77	934167	2365	213 - 350	12117	Pro-13 to Arg-21.	H0543: 2			
HHERV38	933142	2366	288 - 452	12118	Ser-5 to Asn-11,	H0543: 2, H0264: 1 and			

HHHERX04	925700	2367		1 - 399	12119	Pro-37 to Asp-44.	S0426: 1.		
HHHESF07	952214	2368		365 - 601	12120	Pro-5 to Gly-15. Gln-8 to Met-16, Glu-19 to Leu-28, Ser-35 to Phe-42, Lys-46 to Leu-51, Glu-54 to Thr-65, Lys-70 to Phe-76. Gln-19 to Thr-37, Phe-46 to Phe-60. Gly-10 to Thr-17, Trp-39 to Gly-48, Ser-62 to Asp-73. Gln-9 to Lys-18. His-14 to Ser-20. Pro-10 to Phe-15. Cys-36 to Val-41, Arg-50 to Ser-59. Gln-30 to Lys-37, Ser-46 to Thr-57. Ala-10 to Glu-20, Pro-46 to Ser-51. Lys-27 to Glu-104. Lys-21 to Glu-28, Thr-39 to Leu-45. Gln-28 to Asn-36, His-55 to Lys-72, Leu-74 to Arg-81, Gly-88 to Pro-94. Ile-49 to Lys-56. Asn-1 to Arg-6,	H0543: 3 S0114: 1, L0766: 1, L0809: 1, L0749: 1, L0777: 1 and H0543: 1.		
HHHESG02	918639	2369		98 - 328	12121		H0543: 2		
HHHESH33	893701	2370		214 - 495	12122		H0543: 3		
HHHESI92	792431	2371		155 - 253	12123		H0402: 1, H0436: 1 and H0543: 1.		
HHHESJ03	922998	2372		38 - 163	12124		H0637: 1 and H0543: 1.		
HHHESK56	779164	2373		17 - 301	12125		H0543: 2		
HHHESN02	918634	2374		243 - 341	12126		H0543: 2		
HHHESO94	793390	2375		159 - 458	12127		H0543: 2		
HHHESP87	858224	2376		1 - 276	12128		H0543: 2		
HHHEST60	858220	2377		173 - 3	12129		H0543: 2		
HHHESU02	918668	2378		306 - 503	12130		H0543: 2		
HHHESU03	923030	2379		419 - 685	12131		H0543: 2 and S0278: 1.		
HHHESU54	926341	2380		230 - 409	12132		H0543: 2		
HHHESU85	783820	2381		4 - 336	12133		H0543: 2 and L0547: 1.		
HHHESV46	935074	2382		241 - 450	12134		S0053: 1, H0444: 1 and H0543: 1.		
HHHETA53	858211	2383		87 - 368	12135		S0052: 1 and H0543: 1.		
HHHETB42	973127	2384		65 - 232	12136		H0543: 3		
HHHETC50	927000	2385		36 - 242	12137		H0543: 2		

HHETD13	858218	2386	360 - 647	12138	Pro-46 to Lys-58. Gln-63 to His-69, Met-76 to Arg-82.	H0543: 2	
HHETE34	974392	2387	426 - 731	12139	Leu-1 to Tyr-26, Arg-57 to Lys-63.	H0543: 3	
HHETF07	952218	2388	94 - 333	12140		H0543: 2	
HHETF94	793420	2389	84 - 437	12141	Arg-26 to Gly-32, Ala-50 to Met-65.	H0341: 1 and H0543: 1.	
HHETK07	848748	2390	130 - 339	12142	Ser-16 to Met-30, Lys-64 to Asp-70.	H0543: 2, H0556: 1 and L0604: 1.	
HHETM92	790879	2391	163 - 249	12143	Leu-19 to Arg-29.	H0543: 2	
HHETQ54	908567	2392	2 - 532	12144		AR061: 2, AR089: 1 H0521: 1 and H0543: 1.	
HHETR21	936252	2393	131 - 712	12145	Thr-45 to Thr-52, Thr-139 to Asp-145.	H0543: 2	
HHETR94	793434	2394	275 - 553	12146	Tyr-1 to Thr-7, Pro-13 to Thr-20, Gln-84 to Lys-89.	H0543: 3	
HHETS04	926997	2395	86 - 256	12147	Glu-9 to His-25.	H0445: 2, H0402: 1, H0318: 1, H0264: 1 and H0543: 1.	
HHETU20	858206	2396	1 - 165	12148	Ala-1 to Met-22.	H0543: 2	
HHETV35	784894	2397	222 - 130	12149		H0543: 2	
HHETX01	915284	2398	138 - 335	12150	Arg-1 to Lys-16, Gly-30 to Pro-38.	H0439: 1 and H0543: 1.	
HHETY79	774171	2399	102 - 287	12151		T0041: 1 and H0543: 1.	
HHEUJA62	965709	2400	1 - 315	12152	Leu-13 to Met-20, Arg-27 to Leu-67.	H0543: 2, H0318: 1 and T0041: 1.	
HHEUC31	795268	2401	3 - 677	12153	Glu-26 to Pro-35, Glu-56 to Ser-62, Gln-67 to Val-73, Ser-77 to Thr-82, Ala-90 to Val-104, Thr-126 to Glu-134, Pro-205 to Pro-211.	AR089: 4, AR061: 2 H0543: 2 and L0596: 1.	
HHEUC84	788954	2402	183 - 338	12154		H0543: 2	
HHEUJ01	915274	2403	22 - 186	12155	Tyr-16 to Tyr-21.	H0543: 2	

HHEUE86	784879	2404	3 - 158	12156	Pro-8 to Lys-25, Tyr-37 to Asp-42.	H0556: 1, H0445: 1 and H0543: 1.		
HHEUE89	786254	2405	2 - 340	12157		H0069: 1, L0748: 1 and H0543: 1.		
HHEUP02	918655	2406	212 - 376	12158	Pro-50 to Ser-55.	H0543: 2		
HHEUT33	952043	2407	72 - 263	12159	Ile-8 to Asn-14, Val-53 to Tyr-60.	H0543: 2		
HHEUY42	918029	2408	7 - 105	12160		H0543: 2		
HHEV106	933921	2409	24 - 176	12161		L0662: 1, H0576: 1 and H0543: 1.		
HHEVL35	965644	2410	1 - 105	12162		H0543: 2		
HHEVN07	952041	2411	94 - 315	12163		H0543: 2		
HHEVR07	952070	2412	60 - 305	12164	Pro-24 to Gln-32.	S0114: 1 and H0543: 1.		
HHEVS63	973213	2413	418 - 576	12165	Asp-1 to Lys-8.	H0543: 3		
HHEVS95	957950	2414	204 - 407	12166	Ser-32 to Tyr-38, Pro-56 to Ser-61.	H0543: 2		
HHEVV64	974520	2415	267 - 506	12167	Glu-44 to Thr-63.	H0318: 1, H0063: 1, H0679: 1 and H0543: 1.		
HHEWE44	973219	2416	170 - 454	12168	Thr-14 to Glu-24, Pro-33 to Gly-39.	H0543: 3		
HHEWF40	973234	2417	618 - 788	12169		H0543: 3		
HHEWL08	957946	2418	220 - 26	12170	Gln-1 to Lys-9, Cys-28 to Pro-37, Asp-39 to Val-47.	H0543: 2		
HHEWT52	858116	2419	139 - 309	12171		S0114: 1 and H0543: 1.		
HHEWU52	935243	2420	3 - 221	12172		H0543: 2		
HHEWU93	973141	2421	201 - 392	12173	His-7 to Ser-13, Tyr-33 to Phe-38.	H0543: 3		
HHEWY63	858114	2422	97 - 372	12174	Gln-49 to Asn-57.	H0543: 2		
HHEXD07	951983	2423	1 - 156	12175		H0543: 2 and L0599: 1.		
HHEXK51	932911	2424	172 - 26	12176		H0158: 1, S0426: 1 and H0543: 1.		
HHEXX06	933858	2425	1 - 240	12177	Ala-50 to Tyr-56.	H0265: 1 and H0543: 1.		
HHEXY05	920532	2426	69 - 401	12178	Cys-31 to Ile-46.	H0305: 3 and H0543: 2.		
HHEYG35	878225	2427	130 - 426	12179	Lys-59 to Ser-64,	S0002: 1 and H0543: 1.		

HHEYK30	961960	2428	2 - 493	12180	Pro-76 to Ser-82. Ala-9 to Arg-15, Cys-17 to His-26, Gly-34 to Leu-43, Glu-58 to Lys-65, Gln-70 to Met-78, Val-147 to Asp-154.	H0486: 1, L0527: 1, H0521: 1 and H0543: 1.		
HHEYK73	847483	2429	246 - 449	12181	Gln-2 to Asp-9, Arg-22 to Tyr-28, His-53 to Asn-59.	H0543: 2, H0069: 1 and H0635: 1.		
HHEY70	861923	2430	13 - 441	12182	Glu-1 to Gly-6, Leu-30 to Pro-41, Gly-100 to Gly-107, Lys-124 to Asn-131.	H0543: 2		
HHEYQ78	963321	2431	61 - 246	12183	Ser-8 to Lys-15, Glu-30 to Thr-36.	H0581: 1 and H0543: 1.	8	
HHEYV03	922104	2432	238 - 390	12184	Ser-1 to Phe-6.	H0625: 1, L0740: 1 and H0543: 1.		
HHEYZ12	968939	2433	1 - 150	12185	Gln-45 to Asp-50.	H0543: 2		
HHEZA83	973236	2434	313 - 555	12186	Ile-1 to Gly-6, Pro-44 to Gln-52.	H0543: 3		
HHEZJ38	860048	2435	331 - 471	12187	Val-1 to Asp-7.	L0455: 1, S0053: 1 and H0543: 1.		
HHEZP45	952047	2436	47 - 148	12188	Met-1 to Arg-6.	H0543: 2		
HHEZP54	952367	2437	57 - 236	12189		S0114: 1, H0521: 1, H0444: 1 and H0543: 1.		
HHFHP14	960049	2438	2 - 208	12190	Arg-2 to Gln-8.	H0584: 21, H0167: 7 and H0050: 1.		
HILAA18	657314	2439	200 - 322	12191	Ser-2 to Arg-7.	T0002: 1, H0486: 1 and H0445: 1.		
HILBD61	504130	2440	102 - 377	12192	Lys-1 to Gly-7.	H0090: 2 and T0002: 1.		
HILCD94	887182	2441	419 - 595	12193	Met-1 to Arg-11, Asn-29 to Lys-34.	AR051: 42, AR054: 32, AR050: 31 L0766: 3, L0804: 2, T0002: 1, H0580: 1, L0662: 1, L0803: 1, L0805: 1, L0789:		



HJAAH06	960647	2442	2 - 370	12194	Arg-1 to Asn-10, Pro-17 to Lys-22, Thr-30 to Thr-57, Val-63 to Leu-69, Ser-79 to Arg-100.	1, L0749: 1 and L0779: 1. H0090: 1 and T0041: 1.		
HJAAW73	530476	2443	155 - 421	12195	Gln-1 to Ser-19, Glu-31 to Thr-36.	H0354: 1 and T0041: 1.		
HJAAW23	530472	2444	70 - 450	12196		L0749: 2, S0116: 1, L0717: 1, T0041: 1 and L0662: 1.		
HJAAU52	530473	2445	2 - 301	12197		H0306: 1, T0041: 1 and L0589: 1.	19q13.3	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 258501, 600040, 602225, 602225
HJAAU57	661275	2446	1 - 165	12198		T0041: 2		
HJAAV29	669278	2447	3 - 299	12199		S0218: 1, H0264: 1 and T0041: 1.		
HJAAV82	738993	2448	523 - 681	12200		H0591: 2, T0041: 1, L0745: 1 and L0777: 1.		
HJAAW39	530468	2449	114 - 272	12201		S0114: 1 and T0041: 1.		
HJAAW48	530641	2450	2 - 244	12202		H0063: 1 and T0041: 1.		
HJABB37	530467	2451	3 - 434	12203	Lys-5 to Asn-15, Pro-33 to Lys-38.	H0264: 1 and T0041: 1.		
HJABC27	669059	2452	2 - 253	12204	Pro-17 to Ile-22, Ile-39 to Arg-45.	S0134: 1 and T0041: 1.		
HJABH14	530463	2453	145 - 324	12205		T0041: 2		
HJABJ06	954589	2454	1 - 186	12206		H0264: 2 and T0041: 1.		
HJABP04	925557	2455	305 - 436	12207	Ser-6 to Gly-11, Asp-23 to Thr-32.	T0041: 1 and H0423: 1.		
HJABV44	871824	2456	325 - 537	12208	Lys-2 to His-10.	S0134: 1 and T0041: 1.		
HJABV57	839528	2457	145 - 2	12209	Lys-28 to Gly-36, Arg-43 to Arg-48.	T0041: 1 and S0002: 1.	14q24.3	104311, 109150, 182600, 245200, 601208
HJABW28	958721	2458	20 - 238	12210		H0305: 7, L0748: 2, H0583:		

HJABX33	966611	2459	214 - 438	12211		1, H0589: 1, L0471: 1, T0041: 1, H0134: 1 and L0589: 1.		
HJABY68	861548	2460	292 - 495	12212	Pro-4 to Lys-12, Arg-41 to Pro-57.	T0041: 1, H0521: 1 and L0600: 1.		
HJABZ52	857454	2461	37 - 276	12213	Arg-35 to Ser-41, Gly-59 to Thr-64, Cys-72 to Phe-77.	T0041: 2		
HJACB80	746411	2462	123 - 323	12214	Glu-25 to Arg-30.	H0650: 1, T0041: 1, L0766: 1, L0740: 1 and L0777: 1.		
HJACC59	534867	2463	19 - 321	12215		L0622: 1, S0182: 1, T0041: 1, L0789: 1 and L0749: 1.		
HJACC67	518222	2464	18 - 284	12216		T0041: 2		
HJACB47	589114	2465	6 - 152	12217	Cys-5 to Glu-10.	H0265: 1, S0134: 1, H0486: 1 and T0041: 1.		
HJACE79	666768	2466	2 - 256	12218	Lys-6 to Leu-11.	T0041: 2		
HJACF14	659329	2467	225 - 389	12219	Tyr-1 to His-6.	S0116: 1 and T0041: 1.		
HJACF47	507156	2468	109 - 399	12220		H0341: 1, T0041: 1, L0523: 1 and L0747: 1.		
HJACH86	784634	2469	3 - 266	12221	Arg-1 to Gly-10, Ala-20 to Cys-27.	S0218: 1, H0580: 1 and T0041: 1.		
HJADD60	708664	2470	97 - 216	12222		L0766: 4, S0114: 1, T0041: 1, S0002: 1 and S0426: 1.		
HJBAB01	961088	2471	51 - 305	12223	Arg-28 to Thr-33.	T0042: 1 and H0543: 1.		
HJBAD34	508225	2472	51 - 134	12224	Pro-1 to Asn-12.	T0042: 2		
HJBAG75	523069	2473	1 - 279	12225	Ala-19 to Ser-25, Glu-31 to Thr-38, Gly-47 to Gly-52, Phe-58 to Ser-72, Pro-75 to Ala-86.	T0042: 2		
HJBAT26	522697	2474	19 - 150	12226				
HJBAX43	929793	2475	73 - 288	12227	Asp-18 to Pro-26.	T0042: 2		
HJBBD13	765075	2476	2 - 211	12228		H0341: 3 and T0042: 1.		
						AR061: 88, AR089: 72, AR051: 63, AR050: 45, AR054: 28		

HJBCP53	574259	2477	53 - 316	12229			H0486: 1 and T0042: 1.		
HJBDB28	839067	2478	21 - 212	12230	Pro-6 to Asp-15.		T0042: 2		
HJBDG57	750669	2479	81 - 455	12231	Leu-13 to Arg-19, Ala-22 to Gln-29, Pro-38 to Arg-43, Gly-68 to Arg-76, Arg-91 to Trp-100, Thr-108 to Tyr-120.		T0042: 1 and S0426: 1.		
							T0042: 2	3q21	106165, 117700, 117700, 150210, 169600, 180380, 180380, 180380, 190000, 203500, 232050, 276902, 600882, 601199, 601199, 601199, 601471, 601682
HJBDL14	960109	2480	89 - 361	12232	Ser-4 to Pro-16, Gly-23 to Ala-32.		H0305: 3, H0581: 1, T0042: 1, L0438: 1 and L0756: 1.		
HIKSB86	523007	2481	1 - 138	12233			H0202: 2 and H0203: 1.		
HJPAH35	509162	2482	203 - 301	12234			H0083: 2		
HJPAT51	730875	2483	179 - 271	12235	Lys-1 to Trp-13.		H0306: 1 and H0083: 1.		
HKBAC12	857298	2484	435 - 713	12236	Gly-28 to Thr-36.		H0264: 1 and H0625: 1.		
HKBAQ43	934251	2485	1 - 57	12237			H0625: 2		
HKBAT27	963724	2486	2 - 169	12238			H0580: 1, H0581: 1 and H0625: 1.		
HLADA25	791845	2487	13 - 219	12239			H0608: 4 and H0436: 4.		
HLADA89	786490	2488	1 - 483	12240	Pro-7 to Gln-13, Leu-30 to Asp-35, Pro-47 to Cys-64, Ser-86 to Asn-98.		H0638: 1, H0608: 1, H0611: 1 and L0362: 1.		
HLADB78	760896	2489	2 - 151	12241	Gly-29 to Arg-34.		L0766: 2, H0305: 1 and H0607: 1.		
HLEAO21	531287	2490	2 - 109	12242	Asp-31 to Glu-36.		H0073: 1 and H0521: 1.		
HLEDB91	787578	2491	2 - 121	12243	Thr-16 to Ile-22.		H0609: 1 and H0610: 1.		
HLKDB22	766876	2492	614 - 850	12244	Asn-1 to Ser-8.		H0611: 2, L0749: 2, L0777: 2, L0764: 1 and H0522: 1.		
HLKDC49	722400	2493	412 - 582	12245	Glu-10 to Ile-20.		L0731: 2, H0611: 1, H0090: 1, L0659: 1, L0666: 1, L0752: 1 and H0543: 1.		
HLLCD11	967337	2494	2 - 334	12246			S0212: 1 and H0354: 1.		

HLMAC43	799766	2495	140 - 382	12247	Leu-10 to Pro-15, Arg-43 to Pro-50.	H0254: 3 and H0255: 2.		
HLMAB45	783886	2496	20 - 193	12248	Arg-12 to Ser-21.	H0556: 1, H0254: 1 and H0255: 1.		
HLMAB62	796676	2497	71 - 175	12249	Ser-1 to Val-7, Gly-17 to Gly-33.	H0254: 2 and H0255: 1.		
HLMAB83	530107	2498	2 - 238	12250	Cys-11 to Asp-20, Lys-62 to Ser-68.	H0254: 1 and H0255: 1.		
HLMAB45	954125	2499	59 - 289	12251	Gln-1 to Asn-6.	H0254: 2, L0754: 2, L0755: 2, L0761: 1 and L0776: 1.		
HLMAB60	856858	2500	2 - 121	12252	Lys-1 to Arg-12, Pro-29 to Leu-38.	H0254: 1 and H0255: 1.		
HLMAB54	811183	2501	97 - 348	12253	Phe-9 to Gly-16.	H0254: 1 and H0255: 1.		
HLMAB84	615300	2502	11 - 256	12254	Arg-6 to Ser-11.	H0254: 1 and H0421: 1.		
HLMAN25	677519	2503	101 - 166	12255		H0254: 1 and H0255: 1.		
HLMAB11	954571	2504	96 - 299	12256	Pro-10 to Trp-17.	H0254: 2		
HLMAB43	856884	2505	3 - 149	12257		H0254: 2		
HLMAB70	732665	2506	24 - 299	12258		H0254: 1 and H0255: 1.		
HLMAB62	671905	2507	48 - 140	12259	Thr-8 to Cys-13.	H0255: 2 and H0254: 1.		
HLMAB06	960557	2508	151 - 312	12260	Ser-36 to His-45.	L0766: 2, H0254: 1, H0402: 1 and L0748: 1.		
HLMAB14	932679	2509	119 - 262	12261	Lys-1 to Gly-14, Cys-17 to Phe-23, Glu-29 to Arg-46.	H0254: 2		
HLMAB72	821500	2510	428 - 604	12262	Leu-20 to Gly-25, Gln-47 to Ser-59.	H0254: 1 and H0179: 1.		
HLMAB91	920216	2511	129 - 251	12263	Gln-2 to Lys-8.	H0254: 1 and H0255: 1.		
HLMBB25	792549,	2512	1 - 243	12264	Pro-49 to Lys-54, Arg-76 to Arg-81.	H0255: 2		
HLMBB43	530611	2513	3 - 212	12265	Glu-20 to Ser-34.	H0255: 2		
HLMBB56	968209	2514	1 - 192	12266	Gly-1 to Cys-7, Pro-29 to Asn-36, Gln-58 to Arg-64.	H0255: 6		
HLMBB77	799744	2515	206 - 343	12267		H0255: 2 and H0254: 1.		
HLMBB80	950730	2516	217 - 369	12268		H0255: 3		
HLMBF68	753614	2517	142 - 372	12269		S0114: 1 and H0255: 1.		

HLMBQ04	615621	2518	370 - 242	12270	Arg-8 to Glu-14, Ile-31 to Arg-43.	H0255: 1 and H0445: 1.		
HLMBQ77	954969	2519	168 - 533	12271	Pro-26 to Pro-40.	H0457: 2, H0255: 1, H0580: 1, S0002: 1 and L0766: 1.		
HLMBU64	577608	2520	1 - 240	12272	Ala-10 to Gly-16, Tyr-53 to Ile-61.	H0255: 2		
HLMBU82	799755	2521	2 - 202	12273	Gly-1 to Cys-7, Leu-45 to Asn-51, Ser-53 to Pro-59.	H0255: 4		
HLMBV11	967669	2522	22 - 315	12274	Ser-8 to Arg-17, Arg-49 to Trp-59, Leu-67 to Gly-85.	H0255: 1 and H0422: 1.		
HLMBV14	682023	2523	130 - 366	12275	Gly-31 to Arg-36, Ser-50 to Tyr-58.	H0255: 2		
HLMBV24	825595	2524	4 - 180	12276	Glu-1 to Ser-6.	H0255: 3		
HLMBV72	688069	2525	182 - 307	12277		H0255: 2		
HLMBW11	950728	2526	33 - 782	12278	Arg-41 to Phe-47, Glu-51 to Gly-56, Arg-64 to Asn-73, Leu-86 to Lys-96, Pro-98 to Val-111, Thr-119 to Met-124, Gln-126 to Trp-166, Cys-168 to Thr-177, Ser-214 to Leu-220, Gln-229 to Trp-244.	H0255: 2 and L0766: 2.		
HLMBX06	954576	2527	95 - 316	12279	Pro-62 to Ser-67.	H0265: 2, H0556: 2, H0255: 2 and H0423: 1.		
HLMBX19	879667	2528	1 - 246	12280		H0255: 2		
HLMBY16	531053	2529	1 - 156	12281	Lys-1 to Gly-11, Ser-17 to Ala-26.	H0255: 2		
HLMBZ31	967640	2530	7 - 123	12282	Pro-6 to Gly-14.	H0255: 2		
HLMBZ47	577605	2531	79 - 201	12283	Glu-16 to Met-21.	H0255: 1 and H0402: 1.		
HLMBZ73	531401	2532	28 - 222	12284		H0255: 2		
HLMCA13	790952	2533	118 - 411	12285	Thr-32 to Lys-37, Thr-52 to His-60.	H0254: 1, S0216: 1 and L0439: 1.		

HLMCA22	529185	2534	59 - 205	12286			H0254: 2		
HLMCJ32	799767	2535	183 - 350	12287			H0254: 3 and H0255: 2.		
HLMCJ64	739397	2536	208 - 321	12288		Glu-21 to Asn-37.	H0254: 1 and H0255: 1.		
HLMCJ66	707231	2537	1 - 96	12289			H0254: 2		
HLMCK45	698342	2538	84 - 281	12290		Gly-3 to Glu-9.	H0254: 1, H0255: 1 and H0271: 1.		
HLMCL50	921041	2539	14 - 193	12291		Lys-21 to Lys-29.	H0254: 2		
HLMCL93	799699	2540	3 - 371	12292		Trp-8 to Pro-14, Thr-85 to Gly-91.	H0254: 2, H0556: 1, S0116: 1, H0255: 1 and L0604: 1.		
HLMCT06	954615	2541	3 - 131	12293			H0254: 2 and H0255: 2.		
HLMCT15	507212	2542	79 - 258	12294		His-50 to Lys-55.	H0254: 2		
HLMCT24	921543	2543	59 - 217	12295		His-33 to Arg-41.	H0254: 3 and H0255: 1.		
HLMCT79	916590	2544	64 - 180	12296		Arg-16 to Glu-25.	H0254: 1 and H0255: 1.		
HLMCT93	888976	2545	129 - 290	12297		Ser-44 to Gln-49.	AR051: 20, AR050: 19, AR054: 10, H0254: 1 and H0255: 1.		
HLMDE76	529184	2546	5 - 106	12298			H0254: 2		
HLMDF04	694910	2547	2 - 67	12299			H0254: 2		
HLMDF14	799739	2548	201 - 383	12300			H0255: 2 and H0254: 1.		
HLMDF52	571415	2549	54 - 182	12301		Glu-17 to Pro-26.	H0254: 1 and H0255: 1.		
HLMDH54	527128	2550	353 - 475	12302		Val-33 to Ser-40.	H0254: 2, S0114: 1 and H0422: 1.		
HLMDH78	532741	2551	1 - 261	12303			H0254: 2	14q11.2	182600, 186880, 190195, 190195, 222700, 600243, 602279, 602279
HLMDJ37	577239	2552	60 - 365	12304			H0254: 1 and H0255: 1.		
HLMDJ48	720893	2553	2 - 205	12305		His-6 to Gly-16, Phe-23 to Leu-38, Gly-56 to Ser-64.	H0254: 1 and H0255: 1.		
HLMDN83	799742	2554	23 - 352	12306		Pro-9 to Trp-15, Lys-63 to Tyr-74.	H0255: 2 and H0254: 1.		
HLMDO02	920859	2555	3 - 149	12307		Glu-9 to Lys-15, Glu-27 to Lys-33, Ser-38 to His-43.	H0254: 2 and H0255: 1.		
HLMDO18	527896	2556	2 - 148	12308		Gly-17 to Gly-29,	H0254: 2		

HLMDO61	584982	2557	20 - 103	12309	Arg-41 to Gln-49.			
HLMDO65	742749	2558	3 - 419	12310	Lys-1 to Asn-6.	H0254: 2		
					His-1 to Thr-6, Phe-19 to Arg-25, Pro-44 to Leu-54, Lys-57 to Asn-64.	H0254: 1 and H0255: 1.		
HLMDP35	535500	2559	2 - 259	12311		H0254: 2		
HLMQ37	531232	2560	2 - 121	12312		H0254: 2		
HLMQ40	531234	2561	3 - 200	12313	Pro-4 to Ser-16, Gln-59 to Gln-64.	H0254: 1 and H0255: 1.		
HLMQ60	920837	2562	168 - 380	12314	Arg-29 to Tyr-34.	H0254: 2 and H0255: 1.		
HLMR16	530103	2563	2 - 127	12315	Ala-12 to Val-17.	H0254: 2		
HLMR33	959707	2564	235 - 429	12316		H0255: 3 and H0254: 2.		
HLMR70	531235	2565	17 - 106	12317		H0254: 2		
HLMR17	531231	2566	5 - 145	12318		H0254: 2		
HLMU04	571393	2567	3 - 170	12319	Gly-10 to His-21.	H0254: 1 and H0255: 1.		
HLMU07	930471	2568	103 - 297	12320	Gln-52 to Tyr-62.	H0254: 1, H0255: 1 and L0794: 1.		
HLMU17	528040	2569	3 - 233	12321	Glu-17 to Pro-26.	H0254: 2		
HLMU43	575607	2570	2 - 373	12322		L0769: 3, S0052: 2, H0254: 1, H0255: 1, S0002: 1, L0639: 1, L0761: 1, L0800: 1, L0641: 1 and L0794: 1.		
HLMU54	856877	2571	112 - 324	12323	Pro-18 to Arg-46.	H0254: 1 and H0255: 1.		
HLMU71	531228	2572	1 - 132	12324		AR089: 2, AR061: 1 H0254: 2		
HLMU96	799729	2573	99 - 269	12325	Val-6 to Pro-11.	H0254: 2 and H0255: 1.		
HLMV96	934543	2574	600 - 788	12326	Ser-33 to Cys-39.	S0216: 2, S0114: 1, H0254: 1, H0255: 1, H0635: 1, H0271: 1, L0748: 1 and H0423: 1.		
HLMW28	531230	2575	253 - 29	12327		H0254: 2		
HLMW58	799749	2576	20 - 295	12328	Cys-16 to Lys-23.	H0254: 3		
HLMX46	523771	2577	85 - 210	12329	Thr-14 to Val-25, Lys-31 to Thr-42.	H0254: 2		
HLMX59	739523	2578	122 - 418	12330		H0254: 1 and H0305: 1.		

HLM DX71	799758	2579	3 - 215	12331	Gln-1 to Leu-25, Ala-66 to Trp-71.	H0254: 2 and H0255: 2.	
HLM DY24	531219	2580	174 - 422	12332	Gly-3 to Thr-11, Gln-14 to His-20, Glu-46 to Ser-57.	H0254: 2	
HLM DY48	666518	2581	1 - 132	12333	Gly-1 to Ala-7, Phe-9 to Thr-15.	H0254: 1 and H0255: 1.	
HLM DY56	518410	2582	2 - 106	12334		H0254: 2	
HLM FA56	730947	2583	35 - 217	12335		H0255: 2	
HLM FA72	531359	2584	43 - 267	12336		H0255: 2	
HLM FB58	577643	2585	87 - 242	12337	Asp-1 to Ser-10.	H0255: 2	
HLM FD75	799682	2586	2 - 307	12338	Ser-4 to Ser-12.	H0264: 3 and H0255: 1.	
HLM FG58	573130	2587	357 - 169	12339	Leu-1 to Glu-7.	H0255: 1 and S0052: 1.	
HLM FG66	676040	2588	3 - 389	12340	His-1 to Leu-8, Gln-54 to Ala-61, Gln-91 to Leu-100.	H0255: 2	
HLM FH74	671941	2589	156 - 329	12341	Ile-11 to Arg-17.	H0255: 2	
HLM FI89	526929	2590	2 - 184	12342	Lys-15 to Arg-20.	H0255: 2	
HLM FK45	531222	2591	112 - 252	12343		H0254: 1 and H0255: 1.	
HLM FK63	888660	2592	1 - 588	12344	Arg-8 to Gly-17.	AR051: 139, AR050: 138, AR054: 114 H0255: 3	
HLM FK70	856861	2593	67 - 201	12345	Ser-23 to Trp-31.	H0254: 1 and H0255: 1.	
HLM FK92	571369	2594	143 - 373	12346	Glu-1 to Ala-6.	H0255: 2	
HLM FL71	526928	2595	113 - 367	12347		H0255: 2	
HLM FN24	781780	2596	3 - 326	12348		H0254: 1 and H0255: 1.	
HLM FN68	799751	2597	2 - 226	12349		H0255: 2 and H0254: 1.	
HLM FR49	842045	2598	33 - 179	12350		H0255: 2	
HLM FR72	799709	2599	3 - 215	12351		H0255: 3, L0745: 2 and L0383: 1.	
HLM FU09	909666	2600	22 - 216	12352	Gly-18 to Arg-23.	H0625: 2, H0254: 1, H0255: 1, H0576: 1 and L0749: 1.	
HLM FU13	657283	2601	87 - 209	12353	Lys-29 to Leu-40.	H0255: 2	
HLM FU39	856872	2602	143 - 340	12354	Gln-8 to Val-13.	L0439: 2, H0255: 1, L0021: 1, H0318: 1, L0655: 1,	



								S0428: 1, L0352: 1 and H0423: 1.	
HLMFU52	727197	2603	2 - 331	12355	Pro-47 to His-53,			H0255: 2	
HLMFU90	699667	2604	15 - 200	12356	Asn-29 to Thr-34.			H0254: 1 and H0255: 1.	
HLMFW19	534799	2605	3 - 197	12357	Leu-12 to Arg-17.			H0254: 1 and H0255: 1.	
HLMGK40	531355	2606	163 - 351	12358	Asn-44 to Arg-51.			H0254: 1 and H0255: 1.	
HLMGK50	927675	2607	36 - 233	12359				H0254: 1, H0255: 1 and L0766: 1.	
HLMGP66	799725	2608	105 - 302	12360				H0255: 3	
HLMGP96	531225	2609	17 - 160	12361				H0254: 1 and H0255: 1.	
HLMGY13	921457	2610	163 - 294	12362				H0255: 2	
HLMGZ09	625638	2611	162 - 302	12363	His-15 to Arg-21.			H0255: 2	
HLMGZ33	805813	2612	125 - 232	12364	Gly-13 to Thr-26.			H0254: 2, H0255: 2 and L0766: 1.	
HLMHD65	799736	2613	3 - 149	12365				H0254: 2 and H0255: 1.	
HLMHG83	799770	2614	68 - 244	12366	Ser-6 to Glu-14.			H0255: 6	
HLMHG84	572412	2615	99 - 1	12367				H0254: 1 and H0255: 1.	
HLMHH39	823450	2616	1 - 354	12368	Pro-7 to His-14.			H0255: 2 and H0271: 1.	
HLMHH40	878117	2617	48 - 338	12369				H0255: 2	
HLMHH57	714813	2618	3 - 299	12370	Thr-12 to Pro-17, Arg-24 to Asp-30, Gly-53 to Gly-62.			H0255: 2 and L0744: 1.	
HLMHK16	571414	2619	3 - 329	12371				H0254: 1 and H0255: 1.	
HLMHK58	799782	2620	208 - 450	12372				H0255: 3 and H0254: 1.	
HLMHK61	856848	2621	1 - 255	12373	Ala-23 to Gly-38, Ser-59 to Gly-65.			H0254: 1 and H0255: 1.	
HLMHK62	579101	2622	57 - 188	12374	Ala-5 to Pro-11.			H0255: 2	
HLMHL60	778481	2623	62 - 187	12375				H0254: 1 and H0255: 1.	
HLMHM63	578838	2624	35 - 175	12376				H0255: 2	
HLMHN21	516580	2625	141 - 416	12377				H0063: 2 and H0255: 1.	
HLMHN27	856846	2626	2 - 202	12378	Val-17 to Gly-24.			H0255: 1 and S0053: 1.	
HLMHN31	925730	2627	103 - 300	12379	Ser-16 to Asn-26.			L0766: 3, L0599: 2, H0657: 1, H0656: 1, H0255: 1, H0318: 1, L0779: 1, H0445: 1 and H0422: 1	

HLMHN37	723081	2628	2 - 238	12380			H0255: 2 and H0254: 1.	
HLMHN45	668906	2629	1 - 270	12381	Ser-38 to Gly-49.		H0255: 2	
HLMHO11	964945	2630	62 - 139	12382	His-17 to Trp-25.		H0254: 1 and H0255: 1.	
HLMHO21	799772	2631	17 - 238	12383	Pro-2 to Tyr-11, Pro-13 to Arg-19.		H0254: 2 and H0255: 2.	
HLMHO33	799756	2632	116 - 325	12384			H0255: 3 and H0254: 1.	
HLMHP67	967636	2633	11 - 355	12385	Ala-6 to Pro-12, Asp-56 to Ser-61.		H0255: 2 and H0254: 1.	
HLMHP74	953956	2634	93 - 293	12386	Pro-18 to Val-37, Arg-44 to Gly-51.		H0255: 2	
HLMHR25	920711	2635	51 - 311	12387	Ser-1 to Pro-12, Ser-28 to Tyr-38.		H0255: 2	
HLMHR55	825530	2636	1 - 216	12388			H0255: 1 and H0264: 1.	
HLMHS31	752375	2637	140 - 322	12389			H0255: 2 and H0254: 1.	
HLMHS41	574741	2638	3 - 143	12390			H0255: 2	
HLMHS66	574742	2639	267 - 404	12391			L0777: 4, H0255: 2, S0114: 1, L0803: 1, L0780: 1 and L0759: 1.	
HLMHT67	579048	2640	33 - 149	12392	Ala-12 to Arg-21.		H0255: 2	
HLMHT94	531054	2641	156 - 284	12393			H0254: 1 and H0255: 1.	
HLMHU80	799723	2642	52 - 294	12394			H0255: 3	
HLMHW31	536579	2643	90 - 239	12395	Ser-21 to Val-30.		H0254: 1 and H0255: 1.	
HLMHY64	866458	2644	2 - 244	12396	Gly-3 to Lys-8.		AR054: 41, AR051: 38, AR050: 33 H0305: 3 and H0255: 2.	
	971675	9568	3 - 287	19320				
HLMHZ14	799724	2645	51 - 146	12397	Leu-6 to Pro-24.		H0255: 2 and H0254: 1.	
HLMHZ59	530071	2646	2 - 121	12398			H0254: 1 and H0255: 1.	
HLMIC94	710391	2647	28 - 234	12399	Thr-23 to Phe-29, Glu-59 to Gly-67.		H0254: 2 and H0255: 1.	
HLMIE70	578795	2648	1 - 240	12400	Asn-12 to Arg-21, Gly-54 to Arg-67, Ser-72 to Gly-79.		H0255: 2	
HLMIF22	572424	2649	13 - 120	12401			H0254: 1 and H0255: 1.	
HLMIG11	967291	2650	2 - 166	12402	Asn-1 to Ser-13.		H0255: 2	

HLMIG50	856845	2651	52 - 447	12403	Val-1 to His-14, Arg-16 to Asn-26.	H0255: 2 and L0523: 1.	
HLMIG72	799747	2652	201 - 329	12404	Glu-15 to Asp-20.	H0254: 2 and H0255: 1.	
HLMIH10	964890	2653	218 - 400	12405		H0255: 3	
HLMIH44	883871	2654	178 - 396	12406		H0255: 3 and L0589: 1.	
HLMIL62	799713	2655	253 - 414	12407	Gly-31 to Thr-36.	H0255: 3	
HLMIM73	576692	2656	19 - 174	12408		H0255: 2, S0218: 1 and H0402: 1.	
HLMIO47	531224	2657	34 - 138	12409		H0254: 1 and H0255: 1.	
HLMIP23	686670	2658	14 - 391	12410		L0748: 4, H0254: 1, H0255: 17 1, L0787: 1 and L0741: 1.	
HLMIQ11	921009	2659	471 - 785	12411	Ala-34 to Asp-42, Arg-44 to Trp-50, Arg-57 to Arg-64.	L0766: 6, H0402: 3, H0305: 2, H0542: 2, H0254: 1, H0255: 1, H0306: 1, H0581: 1, S0052: 1, L0754: 1, L0749: 1, H0444: 1, H0445: 1 and H0543: 1.	
HLMIQ72	715650	2660	39 - 269	12412	Pro-32 to Ser-40.	H0255: 2, H0254: 1 and H0187: 1.	
HLMIQ73	764522	2661	229 - 399	12413		H0254: 1 and H0255: 1.	
HLMIQ93	576657	2662	1 - 186	12414	Arg-31 to Gly-40.	H0255: 2	
HLMIR23	916938	2663	22 - 357	12415		H0255: 3 and H0254: 1.	
HLMIR40	578756	2664	51 - 227	12416	Glu-48 to Gln-53.	H0255: 2	
HLMIS03	924651	2665	16 - 192	12417	Ser-14 to Ala-20.	H0254: 2 and H0255: 1.	
HLMIS16	572430	2666	131 - 268	12418		H0254: 1 and H0255: 1.	
HLMIS64	572509	2667	77 - 193	12419		H0254: 1 and H0255: 1.	
HLMIS77	971141	2668	6 - 167	12420		H0255: 2	
HLMIS85	578751	2669	165 - 251	12421		H0255: 2	
HLMIS89	572506	2670	2 - 163	12422	Pro-45 to Ile-54.	H0254: 1 and H0255: 1.	
HLMIT37	799711	2671	233 - 60	12423		H0255: 3	
HLMIT43	799705	2672	99 - 308	12424	Gln-2 to Leu-19.	H0254: 2, L0755: 2, H0255: 1 and S0052: 1.	
HLMIT76	856860	2673	235 - 372	12425	Arg-2 to Gln-9.	H0255: 2, H0254: 1 and L0748: 1.	
HLMIV09	799740	2674	57 - 404	12426	Gln-1 to Cys-12,	H0255: 2 and H0254: 1.	

							Gln-27 to Phe-51, Gly-69 to Arg-76.				
HLMIW07	871698	2675	292 - 122	12427						H0255: 3	
HLMIW89	799753	2676	1 - 201	12428			Gly-1 to Gln-7.			H0255: 2 and H0254: 1.	
HLMIW90	920464	2677	144 - 323	12429						H0255: 3 and H0254: 1.	
HLMIX61	727730	2678	114 - 389	12430			Asp-13 to Gln-18.			S0114: 1, H0255: 1 and L0744: 1.	
HLMIX95	960056	2679	59 - 265	12431			Ile-7 to Gln-13, Gln-30 to Asn-35.			H0254: 1, H0255: 1, L0769: 1, L0439: 1 and L0777: 1.	
HLMIX56	571401	2680	76 - 252	12432						H0254: 1 and H0255: 1.	
HLMIZ02	920426	2681	3 - 203	12433			Arg-1 to Ala-6, Pro-11 to Glu-19, Cys-58 to Pro-64.			H0254: 2 and H0255: 2.	
HLMIZ25	825087	2682	1 - 135	12434			His-10 to Trp-21, Met-23 to Ser-29, Gly-36 to Ser-41.			S0212: 1, H0254: 1 and H0255: 1.	
HLMIZ40	715586	2683	70 - 255	12435						H0254: 1 and H0255: 1.	
HLMJA05	932173	2684	173 - 346	12436			Arg-1 to Pro-6, His-18 to Gly-27.			H0255: 2	
HLMJA30	955980	2685	3 - 359	12437			Pro-43 to Trp-52, Ser-56 to Val-62.			H0255: 3	
HLMJA66	799731	2686	227 - 355	12438						H0255: 3	
HLMJA83	712447	2687	100 - 456	12439			Gly-1 to His-19, Cys-78 to Gln-85.			H0255: 1 and H0063: 1.	
HLMJB04	968284	2688	29 - 166	12440						H0255: 2	
HLMJB23	578827	2689	3 - 170	12441			Lys-14 to Ser-28, His-41 to Arg-47.			H0255: 2	
HLMJB60	924974	2690	102 - 260	12442			Arg-18 to Trp-26.			H0255: 2	
HLMJC35	576944	2691	2 - 226	12443			Asn-56 to Arg-67.			H0255: 2	
HLMJC76	770177	2692	71 - 286	12444			Arg-11 to Arg-19, Cys-29 to Met-38.			H0255: 1 and H0607: 1.	
HLMMA16	576612	2693	91 - 321	12445			Arg-63 to Trp-68, Pro-70 to Leu-75.			H0341: 1 and H0255: 1.	
HLMMA52	920292	2694	1 - 384	12446			Gly-1 to Gly-10, His-22 to Ser-34, Gly-39 to Asp-55.			H0657: 1, H0255: 1, H0318: 1 and H0445: 1.	

							His-76 to Gln-94, Pro-96 to Glu-113.					
HLMMA76	799741	2695	82 - 339	12447							H0255: 3	
HLMMC72	760717	2696	104 - 316	12448			Phe-16 to His-24, Glu-27 to Lys-37, Leu-44 to Asp-55.				H0255: 2	
HLMMD05	932127	2697	97 - 414	12449			Ser-1 to Ser-11.				H0265: 1 and H0255: 1.	
HLMMD26	799743	2698	142 - 258	12450			Thr-13 to Leu-18, Arg-20 to His-25.				H0255: 3	
HLMMD28	959900	2699	17 - 154	12451			Leu-6 to Asn-22.				H0255: 3	
HLMMD89	920442	2700	163 - 2	12452			Lys-1 to Asn-7, Gly-36 to Gln-53.				H0255: 3	
HLMME77	710989	2701	82 - 195	12453							H0255: 1 and H0445: 1.	
HLMMF24	677303	2702	191 - 370	12454							H0255: 1, H0057: 1 and L0750: 1.	
HLMMF82	571403	2703	3 - 275	12455							H0255: 2	
HLMMG02	920427	2704	182 - 364	12456							H0255: 2	
HLMMG23	881361	2705	94 - 345	12457							H0255: 2	
HLMMI18	666575	2706	28 - 222	12458			Tyr-1 to Asp-7.				H0255: 1 and H0264: 1.	
HLMMI86	678672	2707	1 - 222	12459			Pro-16 to Glu-22.				H0255: 2	
HLMMJ08	959630	2708	187 - 417	12460							H0255: 1 and S0052: 1.	
HLMMJ37	577571	2709	91 - 366	12461							H0255: 2	
HLMMK28	577670	2710	14 - 427	12462			Asp-1 to Arg-6, His-8 to His-14, His-33 to Pro-43, Glu-86 to Asp-94.				H0255: 2	
HLMMK39	576167	2711	33 - 188	12463							H0255: 2, L0518: 1 and L0758: 1.	
HLMMN01	657354	2712	3 - 278	12464							H0255: 2 and L0771: 1.	
HLMMN32	576180	2713	3 - 227	12465			Pro-13 to Ser-25, Cys-32 to His-37, Arg-60 to Met-66.				H0255: 2	
HLMMN91	795915	2714	2 - 319	12466							H0255: 2	
HLMMO61	740655	2715	3 - 275	12467			Thr-50 to Pro-55, Ala-60 to Trp-69.				H0255: 2	
HLMMP25	576166	2716	79 - 291	12468							H0255: 2 and L0761: 1.	154275, 162200,

												162200, 182138, 239100, 600881, 601954, 602403
HLMMP68	799715	2717	56 - 364	12469	Arg-38 to Lys-44.						H0255: 3	
HLMMP69	754221	2718	26 - 307	12470							H0255: 2	
HLMMP75	876036	2719	49 - 288	12471	Gln-1 to Met-11.						H0255: 4	
HLMMP88	793125	2720	93 - 470	12472	Cys-45 to Arg-50, Ala-72 to Leu-78.						S0052: 3, H0255: 1 and S0053: 1.	
HLMMPR20	799720	2721	158 - 328	12473	Asp-3 to Pro-15.						H0255: 3	
HLMMPR39	711503	2722	85 - 234	12474							H0255: 2	
HLMMPR45	799771	2723	169 - 447	12475	Thr-9 to Arg-15.						H0255: 5	
HLMMPR08	959578	2724	326 - 685	12476							H0255: 1, H0416: 1 and L0749: 1.	
HLMMPR22	799737	2725	60 - 233	12477							H0255: 3	
HLMMPR72	799719	2726	205 - 336	12478	Pro-19 to Cys-29.						H0255: 3	
HLMMPR74	506234	2727	36 - 254	12479	Ala-20 to Gly-28.						H0255: 2	
HLMMPR76	578143	2728	141 - 308	12480							H0255: 2	
HLMMPR42	424663	2729	33 - 272	12481							H0255: 2, S0426: 1, L0518: 1 and L0748: 1.	
HLMMPV25	799718	2730	111 - 317	12482							H0255: 3 and L0749: 1.	
HLMMPV63	463919	2731	153 - 530	12483							H0255: 2 and S0052: 1.	
HLMMPV65	799706	2732	153 - 329	12484							H0255: 3 and S0053: 1.	
HLMMPV66	926188	2733	218 - 448	12485							AR061: 7, AR089: 5 H0255: 2, L0493: 2 and L0662: 1.	
HLMMPW06	935621	2734	2 - 145	12486	Gly-8 to Lys-13.						H0255: 2	
HLMMPW07	953833	2735	41 - 310	12487	Val-43 to Asp-52, Glu-79 to Asn-84.						H0255: 2	
HLMMPW29	577160	2736	63 - 305	12488							H0255: 2	
HLMMPW33	702478	2737	30 - 212	12489	Glu-19 to Ser-34.						H0255: 2	
HLMMPW37	577153	2738	3 - 347	12490	His-1 to Gly-19, Pro-44 to Gly-51, Pro-65 to Gly-70, Ser-75 to Gly-82.						H0255: 2	
HLMMPW44	716797	2739	130 - 291	12491	Ala-33 to Leu-45.						H0255: 2	

HLMNW55	815997	2740	2 - 229	12492			H0255: 2		
HLMNW71	761346	2741	2 - 103	12493		Glu-13 to Arg-22.	H0255: 2		
HLMNW77	577150	2742	112 - 273	12494		Pro-10 to Gly-20, Glu-23 to Arg-30.	H0255: 2		
HLMNX19	861317	2743	574 - 362	12495		Trp-1 to Gln-7, Pro-10 to Gly-17.	H0255: 2 and S0426: 1.		
HLMNX57	734985	2744	123 - 293	12496		Glu-10 to Gly-25, Ser-44 to Leu-56.	H0255: 2		
HLMNX72	760651	2745	1 - 234	12497		Gly-1 to Pro-7.	H0255: 2		
HLMNX73	764455	2746	2 - 250	12498		Ala-1 to Ser-8, Met-23 to His-30.	H0255: 2		
HLMNX85	783429	2747	90 - 206	12499		Thr-1 to Leu-10, Thr-33 to Lys-39.	H0255: 2		
HLMNY01	916636	2748	261 - 557	12500			H0255: 3 and L0774: 1.		
HLMNY03	924511	2749	107 - 355	12501		Leu-10 to Asn-25, Pro-36 to Asp-55.	H0255: 2		
HLMNZ13	856802	2750	250 - 432	12502		Gln-25 to Ser-33.	H0255: 2		
HLMNZ16	927659	2751	3 - 155	12503		Arg-27 to Asn-42.	H0255: 2 and H0341: 1.		
HLMNA14	918207	2752	159 - 692	12504			L0595: 3, L0769: 2, L0779: 2, H0556: 1, H0255: 1, L0794: 1 and L0783: 1.		
HLMNA84	577572	2753	131 - 343	12505		Pro-44 to Gly-49.	L0777: 4 and H0255: 2.		
HLMNA88	856809	2754	106 - 306	12506		Leu-56 to Ala-64.	H0255: 2		
HLMNA91	765862	2755	75 - 386	12507		Arg-11 to Gly-20, Cys-22 to Val-34, Ala-57 to Lys-62, Val-64 to Pro-79.	H0255: 2	3	
HLMNB08	959559	2756	2 - 361	12508		Ala-3 to Glu-8.	H0255: 2		
HLMNB94	575838	2757	67 - 186	12509			H0255: 2		
HLMNE84	760695	2758	34 - 222	12510			H0255: 2		
HLMNG08	876147	2759	164 - 508	12511		Ala-42 to Gly-48, Ala-50 to Met-60, Gln-80 to Glu-91.	L0599: 4, H0255: 1, H0318: 1, L0761: 1, L0655: 1, L0517: 1 and H0543: 1.		
HLMNG68	921008	2760	120 - 263	12512			H0255: 1 and H0445: 1.		
HLMNH23	787043	2761	168 - 422	12513			H0255: 2		
HLMNH25	575921	2762	183 - 407	12514		Trp-26 to Trp-32.	H0255: 2, L0748: 1 and		

HLMNI37	920361	2763	38 - 253	12515	Lys-2 to Gly-10.	L0745: 1.	
HLMNI69	531356	2764	1 - 180	12516		H0255: 2	
HLMNI01	835623	2765	112 - 270	12517	Val-36 to Tyr-43.	H0255: 2	
HLMNI06	935626	2766	7 - 177	12518	Pro-27 to Ile-35.	H0255: 2	
HLMNI08	839948	2767	2 - 205	12519		H0255: 2, L0060: 1 and L0766: 1.	
HLMNI23	675970	2768	147 - 335	12520	Lys-1 to Arg-6, Arg-25 to Leu-35, Lys-41 to Leu-46.	H0255: 2	
HLMNLS5	964739	2769	135 - 281	12521	Arg-23 to Ser-28.	H0255: 2	
HLMNL57	575900	2770	3 - 104	12522		H0255: 2	
HLMNL64	578627	2771	74 - 271	12523		H0255: 2	
HLMNM19	668746	2772	238 - 441	12524	Tyr-4 to His-9.	H0255: 2	
HLMNM39	577649	2773	1 - 213	12525		H0255: 2	
HLMNM44	577106	2774	72 - 197	12526		H0255: 1, H0306: 1 and L0369: 1.	
HLMNM61	575889	2775	200 - 355	12527		H0255: 2	
HLMNN02	920296	2776	2 - 400	12528	Gln-8 to His-15, Gly-30 to Lys-36, Ser-41 to Lys-49.	H0255: 2	
HLMNO52	968377	2777	253 - 456	12529	Lys-36 to Arg-41.	H0255: 2, L0809: 2, L0766: 1 and L0599: 1.	
HLMNQ35	575906	2778	14 - 217	12530	Gln-20 to Gln-25.	H0255: 3	
HLMNT27	752366	2779	93 - 272	12531	His-1 to Ser-8, Arg-24 to Ser-30.	H0255: 3	
HLMNT62	745733	2780	191 - 253	12532	Pro-11 to Gly-21.	H0255: 2	
HLMNU73	577693	2781	1 - 390	12533	Gly-1 to Leu-15, Pro-23 to Asp-35, Leu-55 to Arg-63.	H0255: 2, H0305: 2 and H0556: 1.	
HLMNW94	577157	2782	3 - 251	12534	Arg-35 to Ser-42.	H0255: 2	
HLMNW96	799745	2783	3 - 290	12535		H0255: 3	
HLMNX15	660316	2784	2 - 166	12536		H0255: 2	
HLMNX33	702477	2785	180 - 404	12537	Ala-22 to Pro-28.	H0255: 2	
HLMNX74	765800	2786	147 - 260	12538	Glu-10 to Leu-15.	H0255: 2	



HLNSF63	509519	2787	184 - 351	12539			H0108: 2		
HLNSG27	684650	2788	100 - 252	12540	Pro-4 to Ala-9, Glu-33 to Ala-51.		L0748: 5, L0751: 2, H0486: 12 1, H0108: 1, H0318: 1, L0790: 1 and L0594: 1.		
HLTAA66	503025	2789	18 - 308	12541	Ser-13 to Ser-18.		H0090: 2		
HLTAA94	503019	2790	135 - 275	12542	Gln-12 to Thr-17.		H0090: 2		
HLTAI12	971523	2791	173 - 487	12543	Arg-71 to Val-79.		L0777: 5, H0090: 2, L0743: 2, L0803: 1, L0774: 1, L0784: 1, L0742: 1, L0747: 1, L0749: 1, L0756: 1 and L0779: 1.		
HLTAI56	960750	2792	42 - 188	12544			H0090: 2		
HLTAI59	508603	2793	3 - 83	12545	Lys-17 to Pro-24.		H0090: 2		
HLTAR67	578467	2794	3 - 200	12546	Pro-39 to Gly-50.		H0416: 1 and H0090: 1.		
HLTAR90	524360	2795	3 - 182	12547	Pro-3 to Leu-17, Gln-31 to Lys-42.		H0090: 3		
HLTAT22	508592	2796	170 - 328	12548	Lys-32 to Ser-37.		H0090: 2		
HLTAT93	575133	2797	192 - 323	12549	Lys-19 to Gly-24.		H0090: 2		
HLTAU67	703103	2798	1 - 234	12550			H0090: 2		
HLTAW36	536674	2799	121 - 294	12551	Leu-1 to Phe-9.		H0090: 2		
HLTAW69	753707	2800	1 - 516	12552	Glu-16 to Leu-25, Tyr-36 to Asn-41, Ser-51 to Lys-56, Ser-59 to Ser-72, Val-104 to Thr-129, Arg-139 to Asn-151.		H0090: 1 and H0423: 1.		
HLTBL46	508925	2801	127 - 321	12553			S0114: 1 and H0090: 1.		
HLTBN29	703295	2802	2 - 253	12554	Glu-21 to Arg-26, Glu-28 to Thr-35.		H0421: 1 and H0090: 1.		
HLTBO49	839804	2803	48 - 260	12555	Leu-11 to Leu-17.		L0005: 4 and H0090: 2.		
HLTBU04	928005	2804	209 - 403	12556	Asp-36 to Ser-43.		H0090: 3		
HLTBW51	522881	2805	10 - 171	12557			H0090: 2		
HLTBX34	856609	2806	1 - 168	12558	Leu-25 to Ser-32.		H0583: 1 and H0090: 1.		
HLTCL66	417344	2807	2 - 265	12559	Ser-6 to Leu-16.		H0090: 1 and H0522: 1.		
HLTCM12	888630	2808	30 - 248	12560	Pro-13 to Met-18.		AR054: 1, AR050: 0 H0090: 4		

HLTCQ51	725845	2809	105 - 314	12561	Ile-4 to Pro-14, Glu-18 to Trp-31, Gly-53 to Val-60.	H0090: 1 and H0488: 1.		
HLTCR55	839556	2810	56 - 244	12562		L0748: 7, H0090: 2, H0264: 1, S0052: 1, L0749: 1 and H0445: 1.		
HLTCT75	766511	2811	72 - 230	12563		L0731: 2, H0611: 1, H0090: 1, L0659: 1, L0666: 1, L0752: 1 and H0543: 1.		
HLTCU58	625309	2812	11 - 211	12564	Lys-21 to Glu-26.	H0090: 3		
HLTCV43	715525	2813	81 - 368	12565	Glu-1 to Ser-17, Ala-19 to Ser-27.	H0090: 3		
HLTCV57	535289	2814	1 - 198	12566		H0090: 2		
HLTCV63	574712	2815	2 - 103	12567	Arg-29 to Thr-34.	H0090: 2		
HLTCZ25	574704	2816	20 - 124	12568	Lys-6 to Tyr-15.	H0090: 3, S0212: 2, H0063: 1 2, H0488: 1, L0789: 1 and S0428: 1.		
HLTCZ37	574705	2817	1 - 183	12569		H0090: 2		
HLTDC32	574699	2818	1 - 288	12570	Gly-2 to Pro-10.	H0271: 1 and H0090: 1.		
HLTDC80	574698	2819	194 - 367	12571	Ser-12 to Ala-23.	H0271: 1 and H0090: 1.		
HLTDD44	522698	2820	59 - 115	12572		H0090: 2		
HLTDD62	571328	2821	14 - 259	12573		H0090: 2		
HLTDE78	856603	2822	2 - 157	12574		H0090: 2		
HLTDK54	574714	2823	117 - 290	12575	Ser-30 to Asn-36.	H0090: 2		
HLTDK64	772378	2824	3 - 149	12576		H0543: 2, H0556: 1, H0341: 5q35 1, H0090: 1, H0591: 1, L0766: 1 and L0758: 1.	123101, 164040, 208100, 246530	
HLTDL71	508932	2825	3 - 200	12577	Glu-14 to Phe-22, Val-58 to Gln-64.	H0090: 2		
HLTDT14	973100	2826	34 - 255	12578		H0179: 1 and H0090: 1.		
HLTDY57	934619	2827	160 - 513	12579		H0611: 1, H0069: 1, H0090: 1 and H0264: 1.		
HLTEA13	971722	2828	559 - 681	12580		H0179: 2, H0090: 1 and H0445: 1.		
HLTEE40	711453	2829	160 - 2	12581		H0083: 1 and H0090: 1.		
HLTEF24	871203	2830	3 - 149	12582	Gln-26 to Gln-33.	H0090: 2		

HLTEI47	720474	2831	469 - 597	12583			H0580: 1 and H0090: 1.		
HLTEI53	723405	2832	1 - 231	12584			S0114: 1, H0614: 1 and H0090: 1.		
HLTEK94	793033	2833	83 - 361	12585			H0090: 2		
HLTEL11	967529	2834	38 - 127	12586		Asn-14 to Ile-22, Ser-24 to Phe-30.	H0341: 2 and H0090: 1.		
HLTEL25	508607	2835	2 - 124	12587			H0090: 2		
HLTEL59	851867	2836	378 - 575	12588		Arg-16 to Asn-22, Arg-29 to Glu-35.	H0090: 2 and L0748: 1.		
HLTEO88	955228	2837	133 - 270	12589			H0090: 2		
HLTES50	958906	2838	67 - 255	12590		Arg-8 to Asn-14.	L0766: 4, L0779: 2, H0486: 1, H0090: 1, L0520: 1, L0761: 1, L0666: 1, L0438: 1 and L0745: 1.		
HLTES59	739412	2839	112 - 273	12591			H0250: 1 and H0090: 1.		
HLTEX10	968060	2840	116 - 247	12592		Gly-11 to Ser-19.	H0090: 2		
HLTEX38	573353	2841	84 - 206	12593		Arg-28 to Gln-36.	H0090: 2		
HLTEZ24	572779	2842	237 - 470	12594			H0090: 2 and H0063: 1.		
HLTEZ33	574634	2843	95 - 244	12595		Cys-13 to Arg-20.	H0090: 2		
HLTFA05	932221	2844	185 - 334	12596			H0581: 1 and H0090: 1.		
HLTFA34	703403	2845	2 - 109	12597			H0580: 1, H0090: 1 and L0803: 1.		
HLTGF04	927449	2846	533 - 784	12598		Pro-78 to Lys-84.	L0439: 3, S0426: 2, L0766: 2, H0657: 1, H0591: 1, S0002: 1, L0772: 1, L0775: 1, L0438: 1, H0521: 1, L0748: 1 and L0758: 1.		
HLTGF55	669071	2847	180 - 19	12599		Glu-1 to Asn-6, Phe-27 to Lys-33, Pro-43 to Gly-51.	H0591: 2		
HLTGG25	677696	2848	65 - 310	12600		Asn-1 to Asn-6, Pro-9 to Ser-16.	H0591: 2		
HLTGG61	741529	2849	25 - 186	12601		Glu-21 to Trp-27.	H0591: 2		
HLTGM60	973438	2850	253 - 468	12602		Asn-10 to Cys-15, Lys-35 to Gly-44.	H0591: 17		
HLTGP51	725140	2851	32 - 163	12603		Ser-17 to Ala-22.	H0591: 2		

HLTGP63	744700	2852	238 - 80	12604	Ile-38 to Ile-43.	H0318: 1 and H0591: 1.	
HLTGS44	716323	2853	132 - 251	12605		H0591: 1, L0748: 1 and H0423: 1.	
HLTGV54	729247	2854	2 - 136	12606	Gln-14 to His-19.	H0591: 2	
HLTGV64	665647	2855	228 - 413	12607	Gln-28 to Asn-34.	H0591: 4 and L0758: 1.	
HLTGV67	747584	2856	293 - 430	12608		H0591: 3	
HLTGX26	681233	2857	165 - 311	12609		H0591: 2	
HLTGY75	767060	2858	113 - 343	12610		H0090: 1 and H0591: 1.	
HLTHC34	702078	2859	1 - 159	12611	Leu-28 to Asn-34.	H0591: 3	
HLTHH89	974112	2860	43 - 249	12612		H0591: 3	
HLTHI11	966435	2861	412 - 597	12613		H0591: 3, H0581: 1 and H0444: 1.	
HLTHJ35	707245	2862	379 - 543	12614		L0766: 2, H0581: 1, H0591: 1, H0576: 1 and L0748: 1.	
HLTHJ68	719927	2863	160 - 294	12615		S0218: 1 and H0591: 1.	
HLTHO15	969356	2864	2 - 205	12616		H0591: 2	
HLTHO31	697550	2865	2 - 196	12617		H0591: 2	
HLTHO46	923482	2866	157 - 273	12618		H0591: 2	
HLTHS75	965126	2867	103 - 381	12619	Thr-79 to Leu-85.	H0591: 1 and H0423: 1.	
HLTHV83	780482	2868	670 - 837	12620		H0591: 1 and H0444: 1.	
HLTLJ72	968986	2869	54 - 296	12621		H0591: 2	
HLTAA21	671074	2870	428 - 715	12622	Pro-2 to Lys-19, Glu-24 to Pro-42, Pro-71 to Gln-78, Gly-89 to Lys-96.	L0731: 2, H0402: 1 and H0445: 1.	
HLTAA41	909874	2871	3 - 386	12623	Asp-1 to Ser-7, Pro-10 to Cys-18, Glu-36 to Ala-54, Tyr-83 to Pro-91, Pro-108 to Gly-115.	AR089: 1, AR061: 1 H0445: 4, L0761: 2, H0421: 1, S0002: 1 and L0788: 1.	
HLTAA44	964841	2872	62 - 298	12624	Asp-19 to Arg-30, Lys-73 to Ala-78.	H0445: 5 and L0748: 1.	
HLTAB02	920407	2873	171 - 332	12625	Asn-1 to Pro-6.	S0114: 1 and H0445: 1.	
HLTAB38	861161	2874	3 - 215	12626	Phe-45 to Tyr-50.	S0212: 3 and H0445: 1.	
HLTAC38	668989	2875	1 - 273	12627		H0445: 2	

HL YAD10	964845	2876	350 - 550	12628	Lys-1 to Lys-8, Thr-29 to Ser-36.	H0445: 2		
HL YAE50	576449	2877	313 - 471	12629	Gly-30 to Pro-53.	H0402: 1 and H0445: 1.		
HL YAF20	668872	2878	454 - 663	12630		L0766: 8, L0748: 4, L0756: 2, L0777: 2, L0604: 2, L0157: 1, H0591: 1, L0750: 1, L0779: 1, H0445: 1 and H0543: 1.		
HL YAF28	975007	2879	269 - 424	12631	Lys-11 to Tyr-17.	H0445: 2		
HL YAG42	691747	2880	45 - 152	12632		H0445: 2 and S0428: 1.		
HL YAH26	855981	2881	3 - 419	12633		H0444: 1 and H0445: 1.	14q32.1	107280, 107280, 107400, 107400, 122500, 186960, 245200, 601841
HL YAK12	970807	2882	143 - 295	12634		H0445: 2		
HL YAL83	780075	2883	303 - 482	12635	Lys-1 to Ala-7, Ser-25 to Glu-39, Thr-44 to Gly-53.	S0052: 1 and H0445: 1.		
HL YAO31	698104	2884	125 - 271	12636	Pro-10 to Gln-15, Ser-30 to Arg-37, Gly-43 to Cys-49.	H0445: 2, L0002: 1 and L0594: 1.		
HL YAO67	924042	2885	96 - 314	12637	Asn-22 to Leu-35, Phe-43 to Ala-59.	H0305: 2, L0731: 1 and H0445: 1.		
HL YAP10	964748	2886	288 - 431	12638	Gly-28 to Lys-47.	S0052: 1 and H0445: 1.		
HL YAP26	681892	2887	195 - 362	12639		H0580: 1 and H0445: 1.		
HL YAQ80	868396	2888	319 - 564	12640	Pro-39 to Lys-58.	H0581: 1 and H0445: 1.		
HL YAT56	935552	2889	1 - 213	12641		H0421: 1, S0052: 1 and H0445: 1.		
HL YAU29	576596	2890	3 - 251	12642		H0402: 1, L0745: 1 and H0445: 1.		
HL YAV80	689969	2891	3 - 221	12643	Asp-1 to Ser-16.	H0445: 3		
HL YAW35	780987	2892	261 - 386	12644		H0580: 1 and H0445: 1.		
HL YAX61	707248	2893	184 - 333	12645		H0445: 2		
HL YAX85	575868	2894	2 - 391	12646		H0402: 1, L0761: 1, H0436: 1 and H0445: 1.		
HL YAY62	825513	2895	93 - 350	12647		H0445: 2		

HL YAY65	575863	2896	1 - 237	12648		H0445: 2	
HL YBA01	916635	2897	341 - 478	12649		H0445: 2	
HL YBA42	871648	2898	497 - 664	12650	Ser-38 to Arg-56.	H0445: 2 and L0605: 1.	
HL YBA72	717644	2899	178 - 351	12651		H0445: 2	
HL YBA85	575878	2900	2 - 280	12652	Arg-1 to Thr-9, Lys-64 to Lys-80.	H0445: 2	
HL YBA96	575834	2901	1 - 123	12653	Ser-21 to Glu-29.	H0445: 2	
HL YBB50	708624	2902	158 - 313	12654	Met-11 to Gln-19.	H0445: 2	
HL YBB65	866883	2903	331 - 477	12655	Glu-38 to Arg-43.	S0114: 1 and H0445: 1.	
HL YBD46	575865	2904	2 - 133	12656	Pro-1 to Cys-6, Ser-37 to Thr-44.	H0445: 2	
HL YBF47	706517	2905	259 - 420	12657	Arg-28 to Asn-33.	H0305: 1, L0766: 1, L0517: 1 and H0445: 1.	
HL YBF75	828077	2906	197 - 442	12658	Pro-27 to Phe-35.	L0758: 3, H0264: 2, L0779: 1 and H0445: 1.	
HL YBG18	575872	2907	335 - 478	12659	Lys-11 to Leu-20.	H0445: 2	
HL YBH08	856445	2908	104 - 271	12660		L0749: 2, S0114: 1 and H0445: 1.	
HL YBH56	733472	2909	161 - 406	12661	Ser-17 to Tyr-31, Asn-70 to His-82.	H0445: 2	
HL YBH91	576793	2910	329 - 478	12662		H0090: 1 and H0445: 1.	
HL YBI44	728035	2911	2 - 259	12663	Arg-4 to Ala-10, Val-12 to Gly-21.	H0423: 2 and H0445: 1.	
HL YBJ10	964752	2912	195 - 455	12664	Gly-10 to Arg-25.	H0445: 2	
HL YBJ42	713845	2913	121 - 252	12665		H0445: 3 and L0766: 1.	
HL YBL92	856419	2914	389 - 592	12666		H0445: 3, H0255: 2, L0749: 2, H0556: 1, H0402: 1, H0108: 1, H0090: 1, H0436: 1, H0444: 1 and S0196: 1.	
HL YBM35	625408	2915	81 - 302	12667	Thr-28 to Lys-36, Arg-43 to Glu-48.	H0445: 2 and L0748: 1.	
HL YBM75	757084	2916	138 - 278	12668	Gln-6 to Arg-12, Arg-17 to Arg-25, Asn-30 to Asp-44.	H0445: 2	
HL YBN94	670500	2917	207 - 353	12669		H0445: 2	
HL YBO53	721377	2918	140 - 262	12670	Lys-12 to Gly-27,	H0445: 4	

HL YBR03	924515	2919	203 - 397	12671	Tyr-31 to Ile-38.	H0402: 1 and H0445: 1.	
HL YBR41	712389	2920	334 - 510	12672	Gln-1 to His-13.	H0445: 3	
HL YBR83	750318	2921	1 - 255	12673	Ala-6 to Ser-11, Gly-19 to His-27.	L0805: 2, H0445: 2, L0766: 1, L0803: 1, L0438: 1 and H0436: 1.	
HL YBS12	970795	2922	455 - 646	12674		S0212: 2, L0143: 1, H0202: 1 and H0445: 1.	
HL YBT19	668744	2923	2 - 250	12675		L0749: 2, H0457: 1, L0748: 1 and H0445: 1.	
HL YBT64	527687	2924	67 - 225	12676		H0305: 2, L0809: 1, L0720: 1 and H0445: 1.	
HL YBT69	678175	2925	132 - 383	12677	Tyr-22 to Ser-31.	H0487: 1, H0521: 1 and H0445: 1.	
HL YBT84	575828	2926	1 - 57	12678	Ser-8 to Asn-19.	H0445: 2	
HL YBU28	914702	2927	38 - 196	12679		L0748: 2, H0445: 1 and H0543: 1.	
HL YBU52	727213	2928	121 - 267	12680	Ser-8 to Glu-14.	S0053: 1 and H0445: 1.	
HL YBV42	713837	2929	3 - 209	12681		H0445: 2, L0803: 1, L0789: 1 and L0753: 1.	
HL YBW12	970796	2930	1 - 231	12682	Asp-22 to Val-28, Thr-56 to Ser-66, Pro-72 to Phe-77.	H0264: 1 and H0445: 1.	
HL YBW35	812692	2931	137 - 340	12683	Arg-5 to Phe-13, Ser-18 to Leu-23, Pro-32 to Ser-40.	S0052: 2, H0318: 1, S0428: 1 and H0445: 1.	
HL YBX77	721086	2932	113 - 220	12684		S0114: 1 and H0445: 1.	
HL YBX84	754842	2933	355 - 552	12685	Gly-11 to Gln-18.	H0445: 2	
HL YBZ17	577479	2934	127 - 387	12686	Ser-1 to Leu-7, Lys-60 to Gly-71.	H0457: 2, H0486: 1, H0264: 1, L0768: 1, L0666: 1, H0436: 1, L0754: 1, H0445: 1 and H0542: 1.	
HL YBZ23	856430	2935	20 - 310	12687	Ser-6 to Ser-13.	H0445: 2 and H0422: 1.	
HL YBZ60	682675	2936	82 - 192	12688	Asp-10 to His-19.	S0218: 1 and H0445: 1.	
HL YBZ86	856436	2937	306 - 536	12689	Glu-37 to Lys-52.	H0445: 2, L0439: 1 and L0758: 1.	

HL YCA76	770107	2938	88 - 342	12690	Gln-1 to His-6, Glu-42 to Glu-51, Thr-58 to Glu-66.	S0116: 1 and H0445: 1.		
HL YCA77	677758	2939	595 - 753	12691		H0445: 3		
HL YCC39	710843	2940	458 - 577	12692		H0445: 2, H0521: 1 and L0748: 1.		
HL YCC65	932727	2941	1 - 144	12693	Thr-21 to His-26.	H0445: 2		
HL YCF12	908532	2942	68 - 268	12694	Ser-5 to Ser-12.	H0087: 1 and H0445: 1.		
HL YCF46	718930	2943	82 - 234	12695	Arg-1 to Glu-6.	H0445: 1 and H0423: 1.		
HL YCF70	741417	2944	1 - 111	12696	Thr-15 to Glu-22.	S0218: 1 and H0445: 1.		
HL YCH10	964354	2945	236 - 382	12697	Ser-3 to Gly-10, Ala-14 to Phe-19.	H0635: 1 and H0445: 1.		
HL YCH15	964840	2946	85 - 186	12698		H0445: 5 and L0748: 1.		
HL YCM68	658540	2947	2 - 226	12699		H0445: 1 and H0422: 1.		
HL YCM88	732392	2948	247 - 378	12700		H0264: 1 and H0445: 1.		
HL YCN75	761510	2949	342 - 482	12701	Gly-6 to Thr-16.	S0114: 1 and H0445: 1.		
HL YCO31	697787	2950	17 - 163	12702	Ser-17 to Ser-22.	S0052: 1 and H0445: 1.		
HL YCO66	785990	2951	2 - 139	12703	Gln-5 to Asn-14, Pro-17 to Lys-22.	H0265: 1 and H0445: 1.		
HL YCO68	729293	2952	2 - 130	12704		H0445: 2		
HL YCP66	706435	2953	167 - 367	12705	Arg-61 to Cys-67.	L0766: 2, L0603: 2, H0306: 1, L0307: 1 and H0445: 1.		
HL YCQ53	728046	2954	63 - 314	12706	Asn-5 to Arg-11, Arg-25 to Trp-30, Thr-38 to Gly-48, Cys-66 to Lys-72, Gln-79 to Ser-84.	S0053: 1 and H0445: 1.		
HL YCQ68	752887	2955	3 - 140	12707	Gly-12 to Ala-18.	S0218: 1 and H0445: 1.		
HL YCR47	850147	2956	2 - 241	12708		H0306: 2, S0053: 2, H0445: 2, H0057: 1, H0179: 1, L0667: 1 and S0428: 1.		
HL YCS15	660006	2957	3 - 149	12709	Arg-44 to His-49.	H0445: 2		
HL YCV49	718840	2958	137 - 307	12710		H0318: 1 and H0445: 1.		
HL YCW04	615021	2959	3 - 344	12711	His-1 to Gly-6, Glu-18 to Glu-24.	H0444: 1 and H0445: 1.		
HL YCW13	656827	2960	1 - 192	12712		H0445: 2		



HL YCW20	669541	2961	113 - 346	12713	Ser-24 to Gln-29.	S0002: 1 and H0445: 1.	
HL YCW62	856443	2962	625 - 843	12714		H0445: 5, H0422: 2, H0271: 1 and L0387: 1.	
HL YCY30	650859	2963	3 - 143	12715	Glu-6 to Asn-21.	H0402: 1, S0053: 1 and H0445: 1.	
HL YCZ63	744886	2964	82 - 243	12716		H0591: 1 and H0445: 1.	
HL YDB85	784253	2965	105 - 281	12717		H0445: 2	
HL YDC02	919586	2966	564 - 743	12718		H0657: 1 and H0445: 1.	
HL YDC77	772022	2967	120 - 266	12719	Arg-1 to Gln-8.	H0445: 2	
HL YDD13	657010	2968	350 - 466	12720	Lys-25 to Leu-33.	H0445: 2	
HL YDG06	935149	2969	1 - 183	12721	Tyr-14 to Gln-19, Asp-53 to Gly-61.	H0445: 2 and L0606: 1.	
HL YDG21	856413	2970	371 - 550	12722		H0087: 1 and H0445: 1.	
HL YDG27	682910	2971	173 - 391	12723	Pro-26 to Trp-32, Glu-36 to Cys-43, Pro-46 to Ile-54.	H0264: 1 and H0445: 1.	
HL YDG38	597131	2972	174 - 299	12724	Ile-7 to Arg-24, Gln-33 to Lys-42.	H0445: 2, S0216: 1 and L0748: 1.	
HL YDG59	871587	2973	218 - 451	12725	Arg-1 to Phe-8.	H0486: 1 and H0445: 1.	
HL YDH27	678266	2974	1 - 189	12726	Leu-20 to Trp-26.	L0517: 2, L0748: 2, H0318: 1, H0581: 1, L0761: 1, L0766: 1 and H0445: 1.	
HL YDH32	699082	2975	102 - 245	12727	Lys-36 to Lys-42.	H0445: 2 and L0766: 1.	
HL YDH52	726575	2976	373 - 540	12728	Leu-1 to Lys-8, Lys-19 to Pro-30.	H0445: 2	
HL YDJ08	959055	2977	282 - 527	12729		H0057: 1, L0663: 1 and H0445: 1.	
HL YDK74	738346	2978	124 - 375	12730		H0265: 1 and H0445: 1.	
HL YDL24	677041	2979	71 - 319	12731		L0748: 2, L0608: 2, H0635: 1, L0655: 1 and H0445: 1.	
HL YDL60	909866	2980	3 - 392	12732	Ala-4 to Cys-11, Cys-15 to Arg-20, Pro-29 to Leu-35.	H0656: 1, H0457: 1 and H0445: 1.	
HL YDL75	790244	2981	88 - 258	12733		H0445: 2	
HL YDM51	973377	2982	201 - 431	12734	Asp-18 to Arg-38.	H0306: 2 and H0445: 1.	
HL YDM62	743380	2983	105 - 287	12735		S0053: 1 and H0445: 1.	

HL YDO56	733240	2984	234 - 70	12736			H0402: 1 and H0445: 1.		
HL YDO75	767170	2985	72 - 359	12737	Lys-3 to Arg-8, Met-50 to Lys-68, Lys-90 to Asn-95.		H0445: 2 and L0747: 1.		
HL YDS11	966732	2986	111 - 302	12738	Arg-17 to Ser-23.		L0748: 1, L0749: 1, H0444: 1 and H0445: 1.		
HL YDS66	711565	2987	324 - 506	12739			S0114: 1, H0318: 1 and H0445: 1.		
HL YDS84	687991	2988	175 - 360	12740	Pro-9 to Val-34.		H0255: 1, H0402: 1 and H0445: 1.		
HL YDS91	775483	2989	221 - 379	12741	Asp-1 to Tyr-11.		H0543: 2 and H0445: 1.		
HL YDT03	920268	2990	88 - 222	12742			H0305: 2, H0402: 1, L0521: 1 and H0445: 1.		
HL YDT68	526245	2991	8 - 187	12743	Ile-3 to Thr-11.		H0222: 1, H0264: 1 and H0445: 1.		
HL YDU08	959074	2992	87 - 254	12744			H0445: 2		
HL YDV62	927872	2993	2 - 430	12745	Pro-19 to Cys-27, Glu-45 to Ala-63, Asp-96 to Pro-102, Pro-117 to Gly-124, Pro-132 to Ser-143.		AR051: 24, AR054: 20, AR050: 20, AR061: 1, AR089: 1 H0445: 4, L0761: 2, H0421: 1, S0002: 1 and L0788: 1. S0134: 1 and H0445: 1.		
HL YDX93	669792	2994	72 - 278	12746	Lys-19 to Leu-27, Gly-50 to Pro-55.				
HL YDZ44	716435	2995	137 - 370	12747	Phe-6 to Asn-12.		H0637: 1, L0439: 1 and H0445: 1.		
HL YEB56	710819	2996	1 - 138	12748			H0445: 2, L0659: 1 and L0599: 1.		
HL YED52	931992	2997	36 - 209	12749	Lys-26 to Asp-39.		H0445: 1 and H0543: 1.		
HL YED59	856383	2998	6 - 476	12750	Gln-11 to Val-16, Pro-35 to Lys-41.		L0757: 2, H0445: 2 and L0586: 1.		
HL YED65	747763	2999	111 - 227	12751	Tyr-12 to Thr-18, Ser-26 to Lys-37.		H0445: 2		
HL YED77	615312	3000	53 - 406	12752	Arg-18 to Gly-28, Pro-33 to Gly-41.		S0053: 1 and H0445: 1.		
HL YED85	784254	3001	199 - 501	12753	Ser-13 to Arg-21, Arg-64 to Thr-71.		H0521: 2, H0402: 1 and H0445: 1.		

HL YEE34	703906	3002	410 - 541	12754	Lys-36 to Phe-44.	H0445: 2 and L0526: 1.	
HL YEJ81	488925	3003	38 - 307	12755	Lys-38 to Ser-47, Val-51 to Gly-71, Lys-80 to Lys-85.	S0114: 1, H0521: 1 and H0445: 1.	
HL YEL47	666448	3004	182 - 445	12756	Asn-12 to Leu-19, Pro-37 to Phe-48.	S0114: 1 and H0445: 1.	
HL YEN93	682176	3005	338 - 490	12757	Asn-3 to Asp-11, Lys-27 to Asn-32.	H0318: 1 and H0445: 1.	
HL YEQ40	710986	3006	37 - 156	12758		H0402: 1, S0426: 1, S0428: 1 and H0445: 1.	
HL YEQ73	760566	3007	2 - 214	12759		S0114: 1 and H0445: 1.	
HL YER38	709181	3008	115 - 282	12760	Leu-2 to Ser-11, Lys-38 to Ala-46.	H0444: 1 and H0445: 1.	
HL YET03	923834	3009	161 - 274	12761	Tyr-1 to Phe-6.	H0445: 2	
HL YFA27	682763	3010	281 - 469	12762	Val-6 to Pro-12.	S0426: 1, H0445: 1 and L0362: 1.	
HL YFA58	835409	3011	68 - 328	12763	Gln-10 to Trp-15.	H0552: 4, L0761: 3, H0583: 2, H0556: 1, H0650: 1, L0785: 1, S0002: 1, L0655: 1, H0445: 1 and H0543: 1.	
HL YFC15	923620	3012	3 - 221	12764		H0580: 1 and H0445: 1.	
HL YFF10	964109	3013	265 - 576	12765		H0318: 2 and H0445: 2.	
HL YFF64	746339	3014	3 - 191	12766	Phe-30 to Ser-42.	H0445: 2	
HL YFI64	924558	3015	174 - 311	12767	Ser-13 to Ser-22.	L0770: 1, L0766: 1, H0445: 1 and H0423: 1.	
HL YFK47	953988	3016	260 - 436	12768	Gly-32 to His-49.	H0318: 1 and H0445: 1.	
HL YFO83	863918	3017	16 - 276	12769	Ala-38 to Gln-48.	H0421: 1 and H0445: 1.	
HL YFP23	675373	3018	261 - 476	12770		H0445: 2	
HL YFR38	709184	3019	99 - 1	12771	Lys-28 to Gly-33.	H0445: 2	
HL YFU64	936051	3020	255 - 422	12772	Gly-11 to Gly-32.	S0114: 1 and H0445: 1.	
HL YFX27	682776	3021	73 - 180	12773	Gln-27 to Arg-36.	H0445: 2	
HL YFX40	710851	3022	176 - 424	12774	Gly-55 to Gln-61.	H0370: 1, L0756: 1 and H0445: 1.	
HL YFX96	916452	3023	95 - 244	12775	Arg-5 to Lys-13, Pro-28 to Met-34.	H0445: 2	
HL YFY33	719251	3024	96 - 314	12776		T0002: 1, L0526: 1, L0758:	

HL YFY78	660000	3025	157 - 408	12777		1 and H0445: 1.
HL YGA32	698860	3026	97 - 249	12778		H0521: 1 and H0445: 1. S0116: 1, S0428: 1 and H0445: 1.
HL YGA46	952292	3027	482 - 766	12779	Phe-28 to Lys-36.	H0445: 2, H0556: 1 and S0053: 1.
HL YGC11	966480	3028	3 - 125	12780		S0114: 1 and H0445: 1.
HL YGC18	665721	3029	10 - 366	12781	Thr-6 to Lys-33, Leu-47 to Lys-57, Phe-67 to Glu-83, Tyr-91 to Leu-97, Leu-105 to Ala-110.	L0777: 2, H0445: 2 and L0731: 1.
HL YGC63	744739	3030	3 - 200	12782	Thr-12 to Glu-26, Ser-57 to Gln-66.	H0556: 1, H0069: 1, H0635: 1 and H0445: 1.
HL YGE28	686173	3031	184 - 318	12783	Lys-1 to Lys-11, Ser-22 to His-28.	H0444: 1 and H0445: 1.
HL YGH53	871636	3032	233 - 406	12784		S0212: 1, L0766: 1, L0779: 1 and H0445: 1.
HL YGI23	656698	3033	154 - 258	12785	Glu-10 to Ser-15.	H0445: 2
HL YGK24	676907	3034	39 - 122	12786		L0766: 2, H0402: 1, L0779: 1 and H0445: 1.
HL YGK77	732362	3035	49 - 201	12787	Lys-22 to Lys-31.	H0445: 2 and H0250: 1.
HL YGK82	698553	3036	127 - 294	12788	Gln-43 to Leu-49.	H0445: 1 and H0543: 1.
HL YGK96	967628	3037	245 - 412	12789		S0114: 1 and H0445: 1.
HL YGM41	712099	3038	197 - 310	12790	Glu-2 to Thr-12, Lys-20 to Leu-32.	H0264: 1 and H0445: 1.
HL YGM53	690748	3039	234 - 563	12791	Ile-18 to Trp-24.	H0445: 2 and L0362: 1.
HL YGP15	920077	3040	11 - 229	12792	Thr-7 to Trp-14, Arg-17 to Ser-33.	H0271: 1 and H0445: 1.
HL YGP26	790301	3041	108 - 251	12793		L0748: 7, H0090: 2, H0264: 1, S0052: 1, L0749: 1 and H0445: 1.
HL YGP46	832311	3042	3 - 644	12794	Lys-12 to Ser-29.	H0486: 1 and H0445: 1.
HL YGR39	744849	3043	132 - 299	12795	Gln-1 to Trp-6.	H0444: 1 and H0445: 1.
HL YGV02	856376	3044	80 - 238	12796		H0457: 1 and H0445: 1.
HL YGV07	879387	3045	87 - 353	12797	Arg-17 to Asn-25.	H0341: 1, H0402: 1 and

HL YGV66	697627	3046	449 - 607	12798	Glu-39 to Val-45.	H0445: 1.	
HL YHB85	773990	3047	78 - 254	12799		H0445: 2 and L0748: 1.	
HL YHG09	590369	3048	3 - 179	12800		H0179: 1 and H0445: 1.	
						L0748: 4, H0556: 1, L0378: 1 and H0445: 1.	
HL YHG18	665713	3049	147 - 248	12801	Gly-29 to Glu-34.	H0580: 1, H0445: 1 and L0362: 1.	
HL YHG45	711741	3050	321 - 599	12802	Phe-8 to Cys-15, Asn-34 to Trp-40.	H0116: 1, H0521: 1 and H0445: 1.	
HL YHI75	767066	3051	249 - 410	12803	Asp-1 to Ser-8, Pro-46 to Asn-54.	H0445: 2	
HL YHK02	919199	3052	188 - 361	12804	Asp-32 to Phe-42.	S0134: 1 and H0445: 1.	
HL YHL74	765292	3053	418 - 546	12805		H0487: 1 and H0445: 1.	
HL YHM86	784724	3054	245 - 427	12806		H0444: 1 and H0445: 1.	
HL YHN47	720019	3055	1 - 309	12807		L0666: 1, L0438: 1, L0748: 1, L0439: 1, H0445: 1 and H0422: 1.	
HL YHN67	920551	3056	1 - 336	12808	Lys-74 to Gly-81, Arg-103 to Glu-112.	H0090: 1 and H0445: 1.	
HL YHQ49	659883	3057	58 - 228	12809		H0445: 2	
HL YHQ79	751428	3058	304 - 561	12810		L0748: 2, H0444: 1 and H0445: 1.	
HMAAA35	773472	3059	3 - 230	12811	Ser-32 to Val-37, Gly-42 to Ala-49, Glu-51 to Gln-59, Gly-62 to His-69.	S0144: 1, H0521: 1, H0522: 1 and L0581: 1.	
HMAAE04	385644	3060	2 - 328	12812		S0144: 1 and S0142: 1.	
HMAAE83	745077	3061	166 - 288	12813	Asn-7 to Arg-15, Glu-26 to Asn-40.	S0144: 2	134790, 191044, 600040, 600138
HMAAF10	968199	3062	1 - 363	12814	Pro-28 to Asp-33, Glu-42 to Val-55, Lys-96 to Ala-107.	S0278: 1 and S0144: 1.	
HMABJ56	907640	3063	91 - 390	12815	His-1 to His-8, Glu-13 to Gly-20.	AR089: 1, AR061: 0 S0116: 1, S0144: 1, S0002: 1 and H0521: 1.	
HMABN34	706264	3064	3 - 302	12816	Pro-14 to Leu-19,	S0144: 3, L0659: 1 and	

HMAHQ71	729831	3065	189 - 497	12817	Ser-29 to Arg-39.	H0521: 1. AR089: 1, AR061: 0 S0144: 1 and H0521: 1. S0144: 2 S0144: 2 S0144: 1 and S0002: 1.		
HMACS56	733395	3066	73 - 360	12818	Ser-17 to Trp-26.			
HMACD02	920088	3067	3 - 218	12819				
HMAHL77	708074	3068	3 - 155	12820	Ala-1 to Gly-10, Arg-14 to Glu-20.			
HMAHDM33	970491	3069	4 - 156	12821	Asn-22 to Ile-34.	S0278: 1 and S0144: 1.		
HMAHDX31	697994	3070	29 - 262	12822	Asp-1 to Asp-11, Arg-13 to Lys-19.	S0144: 2 and L0791: 1.		
HMAHYZ55	939916	3071	3 - 746	12823	His-22 to Thr-31, Leu-46 to Cys-62, Leu-93 to Ser-98, Ala-100 to Asp-109, Ser-235 to Ser-240.	AR054: 42, AR051: 21, AR061: 3, AR089: 1, AR050: 1 S0144: 3, H0583: 1, S0278: 1 and L0791: 1. S0144: 2		
HMAHBJ62	744337	3072	2 - 361	12824	Pro-12 to Arg-18, Ser-53 to Gly-60.			
HMAHFD57	734688	3073	3 - 233	12825	Ala-1 to Arg-15, Gly-61 to Ser-67.	H0416: 1 and S0144: 1.		
HMAHFF77	856267	3074	32 - 244	12826	Ser-10 to Asn-19, Pro-27 to Pro-39.	S0144: 4, S0278: 3, S0142: 2 and H0060: 1.		
HMAHFM35	925049	3075	246 - 440	12827	Leu-1 to Arg-13.	S0114: 1 and S0144: 1.		
HMAHFM55	733286	3076	207 - 431	12828		S0278: 2 and S0144: 2.		
HMAHFP30	692598	3077	1 - 156	12829	Arg-13 to Arg-20.	S0144: 4		
HMAHFY42	778521	3078	1 - 312	12830		AR089: 1, AR061: 0 S0144: 1 and S0002: 1. S0144: 2		
HMAHYZ61	741754	3079	14 - 103	12831				
HMAHAGK69	723186	3080	31 - 417	12832	Arg-1 to Ser-6, Lys-23 to Glu-29, Ala-36 to Glu-42, Ser-77 to Glu-89.	AR089: 2, AR061: 1 S0278: 1 and S0052: 1.		
HMAHHP62	736039	3081	2 - 334	12833		S0278: 1 and S0144: 1.		
HMAHHR04	694042	3082	2 - 112	12834	Arg-1 to Gly-8, Thr-17 to Arg-25.	H0161: 1 and S0278: 1.		
HMAHHS30	823422	3083	1 - 159	12835	Gly-6 to Glu-18, Pro-20 to Gly-30.	S0278: 1 and H0521: 1.		

HMAHX69	735355	3084	1 - 357	12836	Gly-47 to Lys-52.	H0556: 1 and S0278: 1.		
HMAIC22	947905	3085	1 - 435	12837	Pro-1 to Arg-16, His-45 to Pro-51.	AR061: 5, AR089: 2 S0278: 2		
HMAIP90	681320	3086	1 - 267	12838		S0278: 2		
HMAIU62	856278	3087	1 - 381	12839	Gly-52 to Pro-60, Phe-70 to Pro-75, Gly-120 to Thr-127.	S0278: 3		
HMAJY01	916259	3088	47 - 199	12840		S0278: 1 and S0142: 1.		
HMAKA11	801917	3089	869 - 1114	12841	Leu-3 to Arg-16, His-32 to Tyr-39, Pro-46 to Gly-54, Tyr-77 to Thr-82.	AR054: 2, AR050: 1, AR051: 0 S0278: 1 and S0144: 1.		
	966282	9569	211 - 606	19321	Ser-8 to Ser-16, Ala-89 to Tyr-95.			
HMAKF82	856311	3090	285 - 542	12842		S0278: 1 and S0002: 1.		
HMAII66	956195	3091	39 - 377	12843	Gln-54 to Val-63, Asn-88 to Pro-93.	AR061: 9, AR089: 3 L0770: 4, H0638: 1, S0278: 1, H0641: 1, L0763: 1, L0809: 1, L0779: 1 and L0758: 1.		
HMAA69	975074	3092	129 - 377	12844	Phe-1 to Met-6.	S0278: 3		
HMAIE11	955999	3093	2672 - 2196	12845		S0278: 1 and S0144: 1.		
HMCAP27	959557	3094	43 - 405	12846		H0477: 1, S0142: 1 and L0800: 1.		
HMCAP60	586435	3095	2 - 301	12847	Arg-1 to Thr-30, Ser-44 to Gly-57, Lys-63 to Arg-68, Gln-72 to Trp-89, His-91 to Asp-97.	S0142: 2	6q22-q23	107470, 107470, 107470, 120110, 121014, 142470, 156225, 164200, 164200, 207800, 601316, 601410, 601757, 602067
HMCAO01	916843	3096	129 - 365	12848		S0142: 1 and S0344: 1.		
HMCAU25	856241	3097	1 - 267	12849	Ser-22 to Trp-35, Thr-43 to Trp-50.	S0142: 1 and S0344: 1.		
HMCAP49	974119	3098	216 - 569	12850	Gly-36 to Met-43, Asp-50 to Ser-58.	S0142: 1, S0344: 1 and H0522: 1.		

HMCZ67	751804	3099	464 - 586	12851	Glu-8 to Asp-14, Lys-36 to Pro-41.	S0142: 2 and L0748: 1.	16	
HMCBI05	932146	3100	157 - 324	12852		S0142: 2		
HMOCA45	722027	3101	1 - 291	12853	Phe-41 to Ser-48.	S0142: 2		
HMOCB30	692830	3102	53 - 343	12854	Gln-72 to Gly-87.	S0142: 3		
HMOCB62	747136	3103	2 - 241	12855	Ala-1 to Pro-17, Leu-26 to Ala-33.	S0142: 2		
HMOCB78	773660	3104	1 - 303	12856	Pro-9 to Ala-21, Pro-39 to Gly-47.	S0142: 2		
HMOCB42	713051	3105	218 - 409	12857	Lys-14 to Ser-23, Glu-42 to Asp-50.	L0766: 2, L0776: 2, L0740: 2, S0134: 1, H0635: 1, L0370: 1, S0142: 1, L0792: 1, H0521: 1, H0522: 1, L0779: 1 and L0366: 1.		
HMCMD32	699249	3106	185 - 337	12858		H0306: 1 and S0142: 1.		
HMCND22	895981	3107	1 - 627	12859	Gly-1 to Lys-9, Lys-15 to Gly-20, Arg-26 to Ala-36, Tyr-108 to Leu-113.	AR089: 2, AR061: 1 S0142: 1, L0747: 1 and H0423: 1.		
HMCNT92	974588	3108	1 - 192	12860	Gly-1 to Ile-17, Cys-32 to Gly-41, Asn-57 to Leu-62.	S0142: 3 and S0344: 1.		
HMCFA71	760034	3109	1 - 111	12861		S0344: 2	10q24-q25	157640, 167409, 174900, 180250, 186770, 236730, 271245, 278000, 278000, 600020, 600095, 600512, 601107, 601130, 602082, 602669, 602669
HMCFB22	963794	3110	2 - 217	12862		S0344: 2		
HMCFR51	725425	3111	2 - 331	12863	Ser-20 to Ala-25.	S0344: 1 and S0053: 1.		
HMCFW22	674074	3112	327 - 521	12864	Ser-14 to Cys-32, Pro-50 to Glu-65.	H0402: 1, H0580: 1, S0344: 1, L0794: 1 and S0052: 1.		
HMC GG31	697533	3113	206 - 349	12865	Glu-24 to Asp-40.	L0749: 2, S0140: 1, H0318:		



									1, H0271: 1, S0344: 1, L0761: 1, L0754: 1, L0780: 1, L0755: 1 and L0758: 1.			
HMCJ36	708050	3114	55 - 162	12866					L0526: 2, H0580: 1 and S0344: 1.			
HMCJ29	690288	3115	1 - 126	12867					S0344: 2			
HMCJ54	846134	3116	196 - 351	12868					H0421: 2, S0344: 1 and L0439: 1.			
HMCJ77	753133	3117	1 - 402	12869					AR061: 384, AR089: 164 H0063: 1 and S0344: 1.			
HMCJA04	927287	3118	231 - 464	12870					S0344: 1 and S0002: 1.			
HMCHE16	856332	3119	57 - 416	12871					S0344: 1 and H0521: 1.			
HMCJG76	769734	3120	1 - 216	12872					H0402: 1 and S0344: 1.			
HMCJ22	974585	3121	364 - 570	12873					S0344: 3			
HMCJA10	963791	3122	159 - 341	12874					S0344: 2			
HMCJA94	853999	3123	1 - 210	12875					H0486: 2 and S0344: 1.			
HMCJ90	788596	3124	153 - 401	12876					S0344: 1 and H0521: 1.			
HMCIS32	698541	3125	31 - 261	12877					S0344: 2			
HMCJ30	671952	3126	189 - 368	12878					H0264: 1 and S0344: 1.			
HMMAB49	462502	3127	1 - 204	12879					AR089: 53, AR061: 4 H0444: 2			
HMMAC10	964846	3128	100 - 237	12880					H0063: 1 and H0444: 1.			
HMMAC19	935580	3129	59 - 166	12881					H0444: 2 and L0526: 1.			
HMMAC79	577951	3130	301 - 456	12882					H0306: 1 and H0444: 1.			
HMMAD06	935734	3131	155 - 322	12883					H0444: 1 and H0445: 1.			
HMMAD35	964749	3132	220 - 393	12884					H0445: 2, L0607: 1 and H0444: 1.			
HMMAD40	666181	3133	88 - 225	12885					H0444: 2			
HMMAD58	891329	3134	27 - 155	12886					AR054: 1, AR050: 1, AR051: 0 H0402: 2 and H0444: 1.			
	971602	9570	1157 - 1558	19322					Lys-1 to Lys-13, Gln-39 to Glu-44, Arg-64 to Arg-79.			

HMMAE12	970892	3135	1 - 198	12887		H0444: 1 and H0543: 1.	
HMMAE43	715381	3136	48 - 218	12888		S0114: 1 and H0444: 1.	
HMMAF44	855916	3137	122 - 364	12889	Lys-24 to Arg-31, Lys-46 to Glu-54.	H0444: 2	
HMMAF70	577918	3138	252 - 386	12890	Ser-20 to Met-25.	L0754: 2, H0444: 2 and L0750: 1.	
HMMAF73	506275	3139	46 - 294	12891	Gly-57 to Trp-64.	H0444: 2	
HMMAH25	677861	3140	191 - 310	12892		H0444: 1 and H0445: 1.	
HMMAH45	674953	3141	83 - 3	12893	Phe-2 to Ala-10, Asn-12 to Lys-18.	H0271: 1, S0052: 1 and H0444: 1.	
HMMAI03	860715	3142	1 - 171	12894		S0052: 1 and H0444: 1.	
HMMAI56	734563	3143	3 - 215	12895		H0444: 2	
HMMAI61	718876	3144	297 - 479	12896	Arg-14 to Glu-26.	H0444: 2 and H0576: 1.	
HMMAJ18	666195	3145	195 - 314	12897		H0444: 1 and H0445: 1.	
HMMAL28	677446	3146	2 - 184	12898		H0090: 1 and H0444: 1.	
HMMAL63	744861	3147	286 - 435	12899	Cys-1 to Thr-10, Tyr-24 to Gly-35.	H0069: 1 and H0444: 1.	
HMMAP18	666199	3148	256 - 396	12900	Lys-25 to Val-32.	H0444: 2	
HMMAP45	717599	3149	169 - 423	12901	Tyr-24 to Gly-30, Pro-46 to Asn-54.	S0053: 1 and H0444: 1.	
HMMAP66	668827	3150	190 - 354	12902	His-7 to Asp-14.	S0114: 1 and H0444: 1.	
HMMAP72	671947	3151	256 - 372	12903	Lys-13 to Ala-20, Thr-30 to Gly-38.	H0305: 2, S0114: 1, H0589: 1, H0635: 1 and H0444: 1.	
HMMAQ04	739304	3152	2 - 427	12904	His-12 to Gly-25, Pro-51 to Arg-67, Pro-95 to Arg-110.	H0402: 1 and H0444: 1.	
HMMAQ15	659966	3153	3 - 197	12905	Thr-16 to Thr-24, Arg-30 to Pro-43.	L0658: 1, S0216: 1, L0438: 1, L0748: 1, L0439: 1 and H0444: 1.	
HMMAQ35	707273	3154	2 - 208	12906	Thr-29 to Asp-34.	H0402: 1 and H0444: 1.	
HMMAR75	919558	3155	121 - 288	12907		L0520: 1, L0532: 1, H0444: 1 and H0445: 1.	
HMMAS88	728019	3156	306 - 488	12908		H0444: 2	
HMMAS91	496192	3157	202 - 468	12909	Pro-47 to Ser-59, Arg-75 to Lys-81.	H0402: 1 and H0444: 1.	

HMMAT17	662705	3158	116 - 259	12910	Ser-4 to Ile-9.		H0444: 2	
HMMAT26	681416	3159	134 - 316	12911	Asn-8 to Gly-14.		H0271: 1, L0527: 1 and H0444: 1.	
HMMAT78	733239	3160	207 - 299	12912			H0318: 1 and H0444: 1.	
HMMAU10	964281	3161	155 - 334	12913	Asn-4 to Lys-12, Pro-48 to Ala-56.		H0444: 1 and H0423: 1.	
HMMAV35	707274	3162	1 - 219	12914	Gly-15 to Ala-21, Arg-27 to Val-35.		S0114: 1 and H0444: 1.	
HMMAV74	742642	3163	85 - 291	12915			H0444: 2	
HMMAV85	784221	3164	63 - 206	12916	Arg-8 to Thr-15, Ser-26 to Lys-37.		S0114: 1 and H0444: 1.	
HMMAV91	854043	3165	2 - 193	12917	His-4 to Arg-17, Pro-49 to Gln-58.		S0052: 2, H0402: 1 and H0444: 1.	
HMMBD12	866824	3166	121 - 369	12918	Gln-26 to Gly-33.		S0114: 1 and H0444: 1.	
HMMBD29	935775	3167	1 - 225	12919			H0305: 4 and H0444: 1.	
HMMBD33	702222	3168	253 - 417	12920			H0444: 2	
HMMBD79	490057	3169	4 - 231	12921			H0576: 1 and H0444: 1.	
HMMBD81	728362	3170	178 - 270	12922	Gln-22 to Trp-31.		S0114: 1 and H0444: 1.	
HMMBH76	959722	3171	82 - 213	12923	Gly-39 to Ser-44.		H0444: 2, H0402: 1 and H0421: 1.	
HMMBI50	868199	3172	129 - 401	12924			H0444: 1 and H0543: 1.	
HMMBJ26	681407	3173	94 - 267	12925	Thr-1 to Ala-10.		H0255: 1, L0748: 1 and H0444: 1.	
HMMBJ31	697735	3174	19 - 156	12926	Pro-10 to Phe-15.		H0444: 2	
HMMBM13	577508	3175	75 - 338	12927			S0114: 1, H0402: 1, L0783: 1, L0758: 1 and H0444: 1.	
HMMBM24	676996	3176	116 - 316	12928			L0748: 2, S0002: 1 and H0444: 1.	
HMMBM31	855965	3177	214 - 384	12929	Lys-1 to Lys-9, Gln-36 to Trp-42.		H0486: 1 and H0444: 1.	
HMMBM54	729350	3178	3 - 173	12930	Leu-14 to Leu-20, Ser-42 to Asn-51.		H0444: 2	
HMMBM77	771979	3179	142 - 360	12931	Pro-8 to His-18, Arg-35 to His-42, Pro-49 to His-56, Pro-64 to Ser-69.		H0444: 2	

HMMBO43	657400	3180	104 - 307	12932	Pro-51 to Arg-58.	S0052: 1 and H0444: 1.	
HMMBO46	856831	3181	211 - 489	12933	Gly-3 to Gln-8, Pro-67 to Lys-72.	H0444: 2, H0255: 1 and L0783: 1.	
HMMBP10	964268	3182	109 - 351	12934		H0444: 2 and L0471: 1.	
HMMBP22	674272	3183	136 - 306	12935	Lys-13 to Asp-18, Ser-32 to Ser-37.	H0444: 2	
HMMBP27	682856	3184	102 - 323	12936		H0556: 1, L0754: 1 and H0444: 1.	
HMMBQ48	721466	3185	3 - 134	12937		H0116: 1 and H0444: 1.	
HMMBR33	702221	3186	259 - 549	12938	Lys-1 to Leu-6, Phe-19 to Gly-25, Leu-33 to Ser-42, Ser-54 to Phe-80.	H0341: 1 and H0444: 1.	
HMMBR77	855942	3187	29 - 178	12939		H0444: 2, H0637: 1 and L0662: 1.	
HMMBR91	757047	3188	7 - 129	12940		H0444: 2	
HMMBR92	791274	3189	26 - 178	12941	Pro-22 to His-27.	H0444: 2	
HMMBS41	711733	3190	8 - 211	12942	Val-17 to Asn-24.	H0402: 1 and H0444: 1.	
HMMBS61	741656	3191	3 - 227	12943	Gly-6 to Asn-33.	S0140: 1 and H0444: 1.	
HMMBT27	682325	3192	174 - 308	12944	Ala-1 to Ser-6.	H0318: 1 and H0444: 1.	
HMMBU27	716049	3193	228 - 368	12945		S0114: 1 and H0444: 1.	
HMMBU75	490083	3194	49 - 363	12946	Ala-21 to Glu-28.	S0053: 1 and H0444: 1.	
HMMBU78	773426	3195	493 - 708	12947		L0748: 3, H0444: 1 and H0445: 1.	
HMMBV17	662684	3196	2 - 193	12948	Pro-22 to Asn-37, Ser-51 to Asn-56.	H0421: 1 and H0444: 1.	
HMMBV53	727572	3197	13 - 138	12949		H0444: 1 and H0445: 1.	
HMMBV71	490078	3198	198 - 383	12950	Glu-17 to Gly-31.	S0116: 1 and H0444: 1.	
HMMBX63	729268	3199	53 - 214	12951	Leu-8 to Ala-16.	H0583: 1 and H0444: 1.	
HMMBZ91	753799	3200	265 - 396	12952		H0264: 1 and H0444: 1.	
HMMCA43	715085	3201	56 - 193	12953		S0052: 1, S0428: 1 and H0444: 1.	
HMMCB67	735293	3202	44 - 250	12954	Lys-4 to Trp-13, Cys-23 to Pro-31.	H0444: 2, H0402: 1, H0264: 1 and L0748: 1.	
HMMCC09	625368	3203	110 - 364	12955	Trp-7 to Glu-14,	H0444: 2	

						Arg-25 to Gly-31, Ala-33 to Arg-42, Phe-58 to Gly-68.				
HMMCD21	670651	3204	59 - 196	12956						H0265: 1 and H0444: 1.
HMMCE16	577388	3205	13 - 174	12957		Pro-6 to Gly-11.				H0444: 2 and H0271: 1.
HMMCE26	935148	3206	306 - 497	12958						L0748: 1, H0444: 1, H0445: 1 and H0422: 1.
HMMCF94	913661	3207	235 - 396	12959						S0114: 1 and H0444: 1.
HMMCH04	944069	3208	3 - 338	12960		Leu-1 to Arg-17, Pro-30 to Pro-35, Ser-44 to Thr-50, Arg-81 to Ala-90.				AR089: 54, AR061: 5 L0717: 1, H0581: 1, L0752: 1 and H0444: 1.
HMMCI03	923771	3209	181 - 363	12961						H0488: 1, H0521: 1 and H0444: 1.
HMMCI43	864098	3210	268 - 444	12962		Asn-7 to Gln-13.				H0318: 1, H0576: 1 and H0444: 1.
HMMCI67	587819	3211	215 - 376	12963						H0486: 1, H0521: 1 and H0444: 1.
HMMCI83	855918	3212	205 - 318	12964		Ser-8 to Phe-13.				H0402: 1 and H0444: 1.
HMMCI93	708060	3213	247 - 528	12965		His-15 to Gln-22, Ser-37 to Glu-43.				H0444: 2
HMMCK81	666792	3214	73 - 360	12966						H0444: 2
HMMCN36	919484	3215	254 - 475	12967		Ser-23 to Cys-40.				H0444: 2
HMOAC95	677110	3216	56 - 220	12968		Pro-49 to Ala-54.				S0278: 1 and H0191: 1.
HMPAA21	670114	3217	544 - 407	12969						H0060: 2, S0116: 1 and L0748: 1.
HMPAE62	754152	3218	3 - 122	12970		Thr-23 to Trp-40.				H0060: 1 and H0444: 1.
HMPAP52	709621	3219	176 - 277	12971		Phe-2 to Ser-8.				H0060: 2
HMPBA34	705509	3220	275 - 442	12972						H0061: 1 and H0271: 1.
HMPBB11	855911	3221	125 - 271	12973		Glu-19 to Tyr-25.				H0061: 2
HMPTA49	723299	3222	211 - 303	12974		Ser-2 to Gly-7, Lys-22 to Gln-27.				H0109: 1 and S0002: 1.
HMPTE27	684607	3223	240 - 359	12975		Glu-18 to Asn-27, Asn-35 to Leu-40.				H0109: 2
HMPTG84	954383	3224	2 - 154	12976						H0109: 2
HMPTI69	932799	3225	211 - 369	12977						H0109: 2

HMQAB40	712805	3226	5 - 211	12978			L0777: 2, H0250: 1, H0521: 1 and L0747: 1.		
HMQAG45	723493	3227	153 - 359	12979			H0250: 2		
HMQUAL95	684917	3228	90 - 317	12980		His-23 to Arg-30.	H0250: 9		
HMQA034	706341	3229	12 - 194	12981			H0250: 2		
HMQAP31	825480	3230	45 - 185	12982			H0250: 2		
HMQAS25	923515	3231	2 - 340	12983			H0063: 2 and H0250: 1.		
HMQUAU20	384780	3232	135 - 263	12984			H0250: 2 and L0748: 1.		
HMQAX65	856318	3233	2 - 250	12985		Val-33 to Phe-40, Arg-43 to Thr-50.	H0250: 7		
HMQBD30	714031	3234	3 - 335	12986			H0250: 3		
HMQBH12	825460	3235	49 - 186	12987			H0250: 2 and H0581: 1.		
HMQBL13	723212	3236	3 - 344	12988		Gln-1 to Tyr-10, Asn-59 to Arg-64, Lys-71 to Gln-79.	H0250: 2		
HMQBL17	664904	3237	2 - 199	12989		Pro-3 to Gln-9, Gln-32 to Cys-50, Glu-58 to Leu-63.	H0250: 3		
HMQBL54	708075	3238	191 - 304	12990		Ser-1 to Trp-6.	H0250: 2 and H0556: 1.		
HMQBM27	855902	3239	58 - 270	12991		Thr-2 to Arg-33.	H0250: 3		
HMQBM59	708073	3240	124 - 345	12992		Asn-6 to Gly-15.	H0250: 2		
HMQBN41	683723	3241	155 - 262	12993			H0250: 2		
HMQBO17	720569	3242	156 - 305	12994		Gln-1 to Ala-14, Lys-21 to Ile-28.	H0250: 2		
HMQBP18	707279	3243	136 - 369	12995		Glu-11 to His-19, Lys-31 to Pro-39.	H0250: 4		
HMQBP26	684887	3244	48 - 182	12996			H0250: 4, L0527: 1 and L0747: 1.		
HMQBP54	855900	3245	108 - 335	12997			H0250: 3		
HMQBT65	708065	3246	173 - 298	12998		Gln-12 to Leu-20.	H0250: 3 and L0665: 1.		
HMQBU96	765162	3247	2 - 244	12999		Ala-1 to Gly-19.	H0250: 2		
HMQBW05	932509	3248	29 - 160	13000			H0250: 1 and H0318: 1.		
HMQBW76	954587	3249	2 - 217	13001		Glu-2 to His-7.	H0161: 3 and H0250: 2.		
HMQBXX07	954058	3250	34 - 267	13002		Pro-8 to Ala-16.	H0250: 3		
HMQBXX35	707280	3251	57 - 365	13003		Pro-22 to Glu-27,	H0250: 2		

						Ala-33 to Pro-38, Pro-58 to Gly-63, His-89 to Pro-94.				
HMQBX74	932510	3252	135 - 73	13004		Leu-2 to Asp-14.			H0250: 3	
HMQBY10	968348	3253	178 - 297	13005					H0250: 3	
HMQBY34	706338	3254	3 - 131	13006		Leu-1 to Cys-7, His-10 to Tyr-15.			H0250: 2	
HMQCC67	740625	3255	155 - 253	13007		Lys-1 to Cys-9.			H0250: 2	
HMQCK09	384771	3256	31 - 177	13008					H0250: 1 and H0179: 1.	
HMQCO77	839604	3257	3 - 287	13009		His-1 to Ser-6, Arg-61 to Thr-66.			H0250: 1 and H0445: 1.	
HMQCV51	725828	3258	249 - 359	13010					H0265: 1 and H0250: 1.	
HMQDA84	783174	3259	150 - 257	13011		Gln-25 to Asp-30.			H0250: 2	
HMQDC34	855890	3260	2 - 313	13012		Leu-16 to Arg-40, Glu-53 to Ala-59.			H0250: 1 and H0090: 1.	
HMQDC96	765810	3261	57 - 200	13013		Pro-14 to Ser-19.			H0250: 2	
HMQDD41	575536	3262	203 - 361	13014					S0114: 1 and H0250: 1.	
HMQDE85	963366	3263	3 - 296	13015					H0250: 1 and H0581: 1.	
HMQDN16	712588	3264	62 - 319	13016					S0114: 1 and H0250: 1.	
HMQDN77	772436	3265	192 - 419	13017		Asn-1 to Gly-10, Asn-13 to Thr-28, Gly-38 to Arg-53.			H0250: 2	
HMQDQ84	783176	3266	43 - 216	13018					H0556: 1, H0250: 1, L0766: 1, L0519: 1 and L0779: 1.	
HMQDZ19	940694	3267	3 - 167	13019		Gln-1 to Gly-13.			H0271: 2 and H0250: 1.	
HMRAD49	868185	3268	3 - 218	13020					H0189: 1 and S0052: 1.	
HMRAD74	765975	3269	343 - 519	13021		Leu-41 to Ala-49.			H0305: 2, H0589: 1 and H0189: 1.	
HMSAC03	960949	3270	2 - 145	13022		Asp-27 to Pro-36.			S0002: 3	
HMSAH89	935429	3271	1 - 144	13023					S0002: 2 and L0740: 1.	
HMSAI08	960482	3272	39 - 224	13024		Arg-5 to Glu-11, Ser-34 to Val-43.			S0002: 1 and H0543: 1.	
HMSAI44	715726	3273	160 - 345	13025					S0002: 2, L0794: 2, L0791: 2, L0803: 1, L0792: 1 and L0665: 1.	

HMSAO46	720686	3274	204 - 368	13026	Pro-26 to Cys-31.	S0002: 2		
HMSAP87	383902	3275	1 - 153	13027		S0002: 2		
HMSAQ64	747120	3276	3 - 167	13028		L0750: 3, L0551: 2, L0748: 2, H0486: 1, L0455: 1, H0264: 1, S0002: 1, L0764: 1, L0791: 1 and L0740: 1.		
HMSAS62	754156	3277	245 - 358	13029		S0002: 2		
HMSAX08	960446	3278	84 - 233	13030		S0002: 3		
HMSAX13	961032	3279	140 - 334	13031		S0002: 2		
HMSAX31	698439	3280	2 - 160	13032	Asn-18 to Gln-23, Glu-30 to Asp-36.	S0002: 2		
HMSAX32	702992	3281	56 - 247	13033	Arg-4 to Cys-10, Val-26 to Ser-34, His-49 to Ser-58.	S0002: 3		
HMSAX33	727443	3282	257 - 463	13034	Gln-34 to Glu-39.	S0002: 2		
HMSAX85	953708	3283	26 - 160	13035	Asn-15 to Leu-22, Arg-39 to Gly-44.	S0002: 3, H0272: 1 and S0426: 1.		
HMSAZ07	855878	3284	2 - 199	13036	Gly-33 to Gly-43.	S0002: 2		
HMSBB19	707489	3285	172 - 378	13037	Leu-2 to Ile-13.	L0766: 4, L0743: 2, H0457: 1, S0002: 1, L0761: 1 and L0775: 1.		
HMSBB44	715738	3286	190 - 336	13038		S0002: 2		
HMSBF59	722005	3287	43 - 237	13039	Thr-53 to Trp-58.	S0002: 3		
HMSBF84	739001	3288	16 - 102	13040	Gln-7 to Phe-14, Pro-23 to Arg-29.	H0591: 1 and S0002: 1.		
HMSBH79	683595	3289	82 - 252	13041		S0002: 3		
HMSB172	925288	3290	149 - 268	13042		S0002: 2		
HMSBM43	510964	3291	176 - 3	13043	Pro-15 to His-27, Asp-35 to Glu-47.	H0265: 1, S0002: 1 and S0052: 1.		
	855873	9571	221 - 487	19323	Val-2 to Gln-14, Trp-29 to Ser-36.			
HMSBM81	383978	3292	32 - 271	13044	Arg-8 to Arg-18.	S0002: 2		
HMSBN71	766408	3293	15 - 176	13045		S0002: 2		
HMSBO55	715684	3294	2 - 148	13046	Lys-1 to Asn-10, Lys-44 to Arg-49.	S0002: 2 and L0766: 2.		
HMSBP46	719425	3295	28 - 138	13047		S0002: 2		



HMSBP80	855871	3296	153 - 386	13048	Thr-1 to Arg-7.	AR054: 18, AR051: 11, AR050: 1 S0002: 10		
HMSBQ93	745862	3297	232 - 420	13049		S0002: 2		
HMSBS51	708662	3298	167 - 307	13050		S0002: 2		
HMSBS63	926833	3299	214 - 399	13051		H0271: 1, S0002: 1 and S0426: 1.		
HMSBS86	785804	3300	1 - 237	13052	Gln-25 to Gly-30, Ser-51 to Gly-59.	S0002: 2		
HMSBU22	677327	3301	1 - 171	13053		S0002: 2		
HMSBU68	709231	3302	193 - 306	13054		S0002: 2		
HMSBV28	970579	3303	97 - 270	13055	Asn-26 to Tyr-35.	S0002: 2		
HMSBX38	761392	3304	121 - 324	13056		S0002: 2 and L0748: 1.		
HMSBX59	558203	3305	2 - 211	13057		S0002: 2, L0783: 1 and L0809: 1.		
HMSBZ69	866997	3306	2 - 697	13058	Ala-14 to Ser-19.	S0002: 2, H0580: 1, L0803: 1 and L0749: 1.		
HMSCA33	702821	3307	89 - 397	13059	Ser-1 to Asn-8, Glu-83 to Ser-90.	H0641: 2, S0002: 2, L0766: 2, L0438: 2, L0439: 2, H0657: 1, H0638: 1, H0637: 1, L0763: 1, L0768: 1, L0794: 1, L0655: 1, H0521: 1, H0522: 1, L0779: 1, L0777: 1 and S0026: 1.		
HMSCB10	968514	3308	43 - 198	13060	Ser-25 to Arg-32.	H0265: 1, H0581: 1 and S0002: 1.		
HMSCD14	924890	3309	1 - 138	13061	Pro-11 to Gly-18.	S0114: 1 and S0002: 1.		
HMSCD15	918133	3310	237 - 635	13062		AR089: 1, AR061: 1 S0002: 2 and L0766: 1.		
HMSCD45	707281	3311	144 - 236	13063	Ile-1 to Glu-6.	S0002: 2		
HMSCE07	954242	3312	21 - 236	13064	Arg-32 to Gly-38.	S0002: 2 and S0426: 1.		
HMSCE37	524245	3313	63 - 185	13065	Thr-1 to Leu-6, Asn-19 to Arg-28.	S0002: 2		
HMSCF41	951821	3314	532 - 753	13066		H0265: 1, H0556: 1, H0657: 1, S0002: 1, L0761: 1 and H0445: 1.		

HMSCF54	731011	3315	108 - 218	13067	Lys-13 to Glu-24.	S0002: 1 and H0522: 1.	
HMSCF58	747250	3316	1 - 87	13068	His-13 to Gly-23.	S0002: 2	
HMSCI26	530239	3317	499 - 663	13069	Arg-30 to Glu-37.	S0114: 1, S0002: 1 and S0053: 1.	
HMSCK06	960601	3318	152 - 358	13070		S0114: 1 and S0002: 1.	
HMSCK17	717703	3319	121 - 420	13071		S0114: 2, H0556: 1, S0134: 1, H0255: 1, H0069: 1, H0625: 1 and S0002: 1.	
HMSCK38	967576	3320	416 - 664	13072		H0069: 1, S0002: 1 and S0426: 1.	
HMSCL01	921754	3321	3 - 146	13073	Pro-23 to Tyr-30.	S0002: 2	
HMSCM10	926836	3322	14 - 253	13074	Gly-5 to Ser-11, Gly-35 to Ile-42.	S0002: 1, S0426: 1, L0529: 1, L0543: 1 and L0748: 1.	
HMSCM95	884019	3323	44 - 124	13075		S0002: 2	
HMSCO18	917009	3324	218 - 451	13076	His-36 to Ser-55, Thr-61 to Thr-67.	S0002: 2 and S0426: 2.	
HMSCO39	709592	3325	51 - 170	13077	Thr-11 to Ser-29, Asp-34 to Tyr-40.	S0002: 2	
HMSCO60	739685	3326	124 - 291	13078		S0002: 2 and L0599: 1.	
HMSCO70	879436	3327	8 - 370	13079	Pro-65 to Asp-72.	H0576: 2, S0002: 1 and L0599: 1.	
HMSCR39	601504	3328	454 - 248	13080		H0402: 1 and S0002: 1.	
HMSCR82	806176	3329	169 - 264	13081	Asp-5 to Ser-11, Cys-25 to Ser-32.	S0002: 2	
HMSCU35	725513	3330	1 - 570	13082	Asn-1 to Ala-14, Pro-16 to Gln-23, Arg-29 to Asn-54.	S0002: 2 and S0426: 1.	
HMSCY29	703105	3331	197 - 334	13083		S0002: 2 and L0774: 2.	
HMSCY91	789306	3332	434 - 195	13084	Lys-1 to Pro-8, Ser-13 to Ala-19.	H0580: 1 and S0002: 1.	
HMSCZ51	724839	3333	3 - 125	13085		S0002: 2	
HMSDA03	881563	3334	91 - 345	13086		S0002: 2 and H0341: 1.	
HMSDB74	765933	3335	74 - 271	13087	Val-23 to Ile-37.	S0114: 1 and S0002: 1.	
HMSDD80	503967	3336	149 - 577	13088	Ala-36 to Trp-54, Lys-72 to Leu-82.	L0748: 3, S0002: 2 and L0740: 2.	
HMSDF01	921672	3337	138 - 317	13089		S0002: 2	

HMSDG77	708078	3338	18 - 353	13090	Ser-15 to Ser-25, Gly-31 to Ala-39, His-76 to Glu-90.	S0002: 2	
HMSDK32	416928	3339	51 - 266	13091		S0002: 2	
HMSDM29	703075	3340	27 - 164	13092		S0002: 2	
HMSDP23	583670	3341	106 - 324	13093		H0264: 2, S0002: 1 and H0543: 1.	
HMSDQ33	702772	3342	1 - 240	13094	Ala-7 to Ala-13, Asp-48 to Gln-57.	S0002: 2 and L0700: 1.	
HMSDR06	954682	3343	2 - 127	13095	Asp-6 to Phe-12.	S0002: 2	
HMSDR55	732443	3344	76 - 198	13096		S0002: 2	
HMSDU43	868183	3345	290 - 3	13097	Leu-6 to Leu-13, Gln-19 to Ser-31, Thr-37 to Leu-43, Lys-87 to Lys-96.	S0002: 2, H0305: 1, L0774: 1 and L0779: 1.	
HMSDU73	753010	3346	3 - 128	13098		H0486: 1 and S0002: 1.	
HMSDV49	722194	3347	23 - 142	13099	Pro-26 to Gly-31.	S0002: 2	
HMSEG37	708656	3348	1 - 216	13100		S0002: 2, L0790: 1 and L0438: 1.	
HMSEM59	708076	3349	2 - 55	13101	Lys-7 to Lys-13.	S0002: 2	
HMSEM80	718087	3350	54 - 170	13102		S0002: 2	
HMSEO23	676369	3351	236 - 406	13103	His-25 to Phe-33, Ser-36 to Asn-41.	S0002: 2	
HMSEU01	921628	3352	11 - 178	13104	Glu-1 to Ser-8.	S0002: 2	
HMSFH05	932219	3353	1 - 165	13105	Ser-13 to Gly-23.	S0002: 2	
HMSFH21	671133	3354	46 - 288	13106	Lys-18 to Glu-35, Glu-57 to Gly-62, Gly-73 to Thr-78.	S0002: 3	
HMSFH24	855826	3355	88 - 258	13107		S0002: 2	
HMSFH27	682204	3356	30 - 197	13108	Leu-1 to Gln-8, Glu-11 to Ala-22, Leu-28 to Asp-39.	S0002: 2	
HMSFH29	689857	3357	1 - 156	13109		S0002: 2	
HMSFH31	583757	3358	354 - 1	13110		S0002: 2 and S0114: 1.	
	693702	9572	88 - 396	19324			
HMSFH34	706349	3359	24 - 194	13111		S0002: 2	

HMSFH39	705586	3360	168 - 269	13112	Glu-7 to Lys-12.	S0002: 4 and L0731: 1.	
HMSFH59	739415	3361	92 - 214	13113	Ser-5 to Lys-10.	S0002: 2	
HMSFH73	764554	3362	87 - 182	13114		S0002: 2	
HMSFH79	775318	3363	2 - 220	13115		S0002: 3	
HMSFH83	780301	3364	1 - 198	13116	Leu-54 to Asp-60.	S0002: 2	
HMSFK32	671136	3365	125 - 241	13117		S0002: 2	
HMSFL10	968061	3366	63 - 269	13118	Thr-14 to Trp-25, Arg-56 to Cys-69.	S0002: 2	
HMSFL41	934139	3367	289 - 471	13119		S0002: 2, S0426: 1, L0438: 1 and H0543: 1.	
HMSFL49	683406	3368	79 - 300	13120	Ser-24 to Cys-29, Asp-35 to Arg-50, Glu-61 to Asp-69.	S0002: 2	
HMSFN48	697991	3369	285 - 458	13121		S0002: 3 and H0422: 1.	
HMSFQ48	721795	3370	3 - 323	13122	Glu-18 to Phe-24, Trp-36 to Arg-44, Gly-62 to Trp-71, His-73 to Asn-79.	S0002: 3, H0179: 1, L0645: 1, S0428: 1 and H0444: 1.	
HMSFQ69	657538	3371	68 - 235	13123	Glu-9 to Gln-14, Arg-41 to Met-47, Glu-49 to Arg-54.	S0426: 2, S0002: 1, L0770: 1 and S0052: 1.	
HMSFR29	693440	3372	43 - 165	13124	Thr-1 to Asn-7, Tyr-12 to Ser-22.	S0114: 1 and S0002: 1.	
HMSFR69	738588	3373	267 - 34	13125	Phe-3 to Pro-24.	S0002: 3	
HMSFR71	760517	3374	129 - 212	13126		S0002: 2	
HMSFR92	861344	3375	275 - 463	13127		S0002: 2 and S0426: 2.	
HMSFS59	739420	3376	75 - 284	13128	Lys-10 to Tyr-17.	S0002: 2	
HMSFS69	757687	3377	2 - 157	13129	Gly-12 to Ala-18.	S0002: 3	
HMSFT23	855812	3378	1 - 240	13130	Glu-38 to Gly-51.	S0002: 2	
HMSFT52	727302	3379	50 - 409	13131	Glu-7 to Gln-15, Gly-35 to Ser-44, Arg-84 to Lys-91.	H0087: 1, S0002: 1 and L0748: 1.	123620, 151410, 600850
HMSFT73	761647	3380	182 - 337	13132		S0002: 2 and H0581: 1.	
HMSFW13	917020	3381	3 - 221	13133		S0002: 2	
HMSFX01	917021	3382	225 - 428	13134	Cys-1 to Ser-6.	S0002: 4 and L0753: 1.	

HMSFX08	959784	3383	73 - 198	13135	Leu-34 to Gln-42.	S0002: 1 and S0426: 1.	
HMSFY49	574906	3384	2 - 166	13136	Ser-15 to Phe-20.	S0002: 3 and S0426: 1.	
HMSFY70	757338	3385	50 - 142	13137	Leu-3 to Asn-11.	S0002: 3	
HMSFZ04	615473	3386	3 - 134	13138		H0318: 1 and S0002: 1.	
HMSGGA34	706355	3387	16 - 192	13139		S0002: 2	
HMSGGA41	712490	3388	300 - 470	13140		S0002: 2 and S0218: 1.	
HMSGGB07	953715	3389	135 - 344	13141	Pro-10 to Lys-18.	S0002: 2	
HMSGC69	757337	3390	49 - 183	13142		S0002: 2	
HMSGC76	767661	3391	1 - 357	13143	Pro-21 to Ala-30, Lys-32 to Leu-46.	S0002: 2	
HMSGD02	920525	3392	232 - 372	13144	Gln-1 to Phe-8, Leu-11 to Pro-17, Leu-37 to Trp-44.	S0114: 1 and S0002: 1.	
HMSGD15	959468	3393	95 - 346	13145	Gln-32 to Phe-38, Trp-50 to Ala-60.	S0002: 2	
HMSGH49	712123	3394	260 - 406	13146		H0580: 1 and S0002: 1.	
HMSGI42	712994	3395	132 - 353	13147		S0002: 2	
HMSGK16	861329	3396	151 - 594	13148	Arg-46 to Gln-71, Pro-83 to Pro-88, Gly-107 to Glu-122, Lys-138 to Arg-148.	S0002: 3, S0426: 2, H0580: 1, H0486: 1 and L0748: 1.	
HMSGK82	778875	3397	35 - 184	13149	Met-14 to Asn-24.	S0002: 1 and H0521: 1.	
HMSGI27	638097	3398	213 - 527	13150	Ser-96 to Ala-102.	AR051: 35, AR054: 29, AR089: 24, AR050: 20, AR061: 7 S0002: 1, L0766: 1 and H0445: 1.	
HMSGP45	699243	3399	219 - 440	13151	Cys-8 to Gly-28, Pro-31 to Glu-36.		
HMSGP49	723131	3400	3 - 254	13152	Gln-1 to Glu-7. Pro-1 to Ser-8, Tyr-26 to Ser-32.	S0002: 2 and H0179: 1. S0002: 3	
HMSGP73	925385	3401	63 - 974	13153	Asp-48 to Met-55, Cys-59 to Ala-65, Leu-72 to Ser-87, Thr-104 to Phe-115.	L0766: 3, H0179: 1, S0002: 1, L0761: 1 and L0786: 1.	

HMSGQ30	692880	3402	24 - 242	13154		S0002: 2	
HMSGQ57	733869	3403	143 - 277	13155		S0002: 2 and H0271: 1.	
HMSGR88	575241	3404	1 - 204	13156		S0002: 2	
HMSGT45	722069	3405	128 - 253	13157		H0179: 1 and S0002: 1.	
HMSGU52	727300	3406	2 - 154	13158	Pro-29 to Lys-38.	S0002: 2	
HMSGU76	677512	3407	201 - 296	13159	Lys-10 to Cys-17, Gln-20 to Gly-27.	S0002: 2	
HMSGU89	963497	3408	7 - 252	13160	Leu-2 to Pro-7.	S0002: 1 and H0521: 1.	
HMSGV47	920116	3409	151 - 297	13161		S0002: 2 and L0523: 1.	
HMSGW16	767621	3410	187 - 357	13162		S0002: 3	
HMSGX02	920511	3411	84 - 224	13163	Gly-8 to Leu-22.	S0002: 2	
HMSGX12	792437	3412	3 - 137	13164	Glu-1 to Ala-8.	H0638: 1, S0142: 1 and S0002: 1.	
HMSGX14	871492	3413	19 - 171	13165	Lys-41 to Thr-50.	AR089: 14, AR061: 5 S0002: 2 and S0052: 2.	
HMSGX43	715425	3414	12 - 149	13166	Asp-37 to Phe-46.	S0002: 2	
HMSHA04	757509	3415	118 - 249	13167		S0002: 2	
HMSHA37	708660	3416	239 - 343	13168	Tyr-30 to Pro-35.	S0002: 2	
HMSHB10	964651	3417	142 - 378	13169		S0002: 2	
HMSHB14	657543	3418	3 - 269	13170	Glu-69 to Gly-80, Val-83 to His-89.	H0318: 1 and S0002: 1.	
HMSHC94	960196	3419	3 - 245	13171	Cys-27 to Ala-34.	S0002: 2	
HMSHD50	724397	3420	1 - 213	13172	Lys-7 to Tyr-27, Phe-36 to Ser-43, Pro-53 to Glu-59, Asn-65 to Trp-71.	S0002: 2	
HMSHE51	725692	3421	269 - 361	13173		S0002: 2	
HMSHE55	923378	3422	2 - 445	13174	Pro-42 to Cys-48, Ala-69 to Leu-97, Gly-103 to Asn-108.	S0114: 1, S0134: 1, S0344: 1 and S0002: 1.	
HMSHG24	676545	3423	3 - 362	13175	Cys-9 to Gly-21, Gln-35 to Arg-41.	S0002: 1 and S0052: 1.	
HMSHI54	920119	3424	3 - 257	13176	Pro-35 to Phe-43, Glu-62 to His-67, Arg-79 to Leu-84.	S0002: 2	

HMSHI94	967167	3425	331 - 591	13177	Gln-20 to Gly-35, Val-43 to Thr-51, Phe-70 to Gly-77.	AR089: 3, AR061: 1 H0271: 1, S0002: 1 and L0766: 1.	1p35-p34	118210, 120550, 120570, 120575, 121800, 130500, 133200, 138140, 138971, 168360, 171760, 171760, 172411, 176100, 176100, 178300, 185470, 230000, 230350, 255800, 602771
HMSHK14	920106	3426	101 - 271	13178		S0002: 2		
HMSHL09	789229	3427	1 - 171	13179		H0264: 1 and S0002: 1.		
HMSHL18	690655	3428	2 - 151	13180		S0002: 3, L0766: 3, L0779: 2, L0664: 1 and L0755: 1.		
HMSHL85	773811	3429	124 - 252	13181	Lys-7 to Lys-13.	S0002: 2		
HMSHM28	855792	3430	335 - 478	13182	Pro-43 to Ala-48.	S0002: 2 and L0759: 1.		
HMSHO64	746582	3431	1 - 411	13183	Ser-11 to Ser-21, Ser-84 to Ala-89, Pro-98 to Arg-107.	AR089: 2, AR061: 2 S0002: 2		
HMSHP08	868170	3432	100 - 378	13184		S0002: 2		
HMSHQ07	953389	3433	292 - 447	13185		S0002: 1 and S0426: 1.		
HMSHR29	924813	3434	2 - 361	13186	Arg-23 to Arg-34, Pro-43 to Ala-51, Asn-85 to Val-90.	H0318: 1 and S0002: 1.		
HMSHR64	746587	3435	184 - 291	13187		S0002: 2		
HMSHT10	964647	3436	28 - 336	13188	Asp-26 to Asp-32, Gly-67 to Pro-72.	S0002: 2		
HMSHT46	959516	3437	59 - 193	13189		S0052: 6 and S0002: 1.		
HMSHU10	964646	3438	213 - 413	13190	Lys-16 to His-25, Leu-27 to His-32.	S0002: 1 and S0426: 1.		
HMSHU55	731775	3439	28 - 519	13191	Ser-6 to Arg-11, Phe-25 to Thr-36, Val-54 to Arg-59, Pro-70 to Asn-80, Arg-106 to Asp-115,	H0264: 1 and S0002: 1.		

HMSHV09	731740	3440	169 - 324	13192	Gly-125 to Ala-132.	S0002: 2	
HMSHV44	716596	3441	191 - 496	13193	Asp-25 to Ser-30.	S0002: 1, S0426: 1 and L0748: 1.	
HMSHW22	855779	3442	159 - 344	13194	Asp-15 to Lys-22, Arg-28 to Ile-35.	S0002: 2	
HMSHW84	783036	3443	69 - 191	13195	Arg-18 to Gly-27.	H0087: 1 and S0002: 1.	
HMSHW93	792302	3444	132 - 287	13196		S0002: 1, S0426: 1 and L0754: 1.	
HMSHY07	953331	3445	1 - 147	13197	Tyr-21 to Gly-28.	S0002: 2	
HMSHZ03	924136	3446	2 - 262	13198	Arg-1 to Leu-17, Pro-40 to Gly-48, Ala-64 to Gln-74.	S0002: 1 and S0426: 1.	
HMSHZ56	733386	3447	127 - 315	13199	Gly-1 to Lys-11, Ser-38 to Leu-44.	S0002: 2	
HMSIA12	948521	3448	3 - 212	13200	Asp-1 to Arg-9, Pro-15 to Pro-24, Ala-30 to Ser-38, Pro-48 to Gln-59.	S0002: 1 and S0426: 1.	
HMSIB73	578777	3449	252 - 416	13201		S0142: 2 and S0002: 1.	
HMSIB86	785493	3450	64 - 468	13202	Ser-42 to Cys-49, Thr-53 to Gly-60.	S0002: 2	
HMSIC37	685586	3451	35 - 226	13203	Arg-3 to Asp-9.	S0002: 2	
HMSIC72	740365	3452	245 - 364	13204	Glu-9 to Gly-14.	S0002: 2	
HMSID81	774047	3453	2 - 454	13205		S0002: 6	
HMSIE11	967013	3454	58 - 138	13206		S0212: 1 and S0002: 1.	
HMSIE52	727146	3455	115 - 321	13207	Ser-9 to Ser-14, Lys-17 to Asn-28, Leu-32 to Asn-37, Glu-44 to Thr-50.	S0002: 2	
HMSIG74	725842	3456	183 - 308	13208		L0748: 2, H0083: 1 and S0002: 1.	
HMSII81	385937	3457	36 - 191	13209		S0002: 2	
HMSIJ85	916552	3458	2 - 151	13210		H0402: 1 and S0002: 1.	
HMSIN64	963441	3459	2 - 262	13211	Thr-18 to Asp-27, Pro-37 to Arg-61.	S0426: 2 and S0002: 1.	
HMSIN75	728670	3460	66 - 305	13212		S0002: 2	



HMSIO61	741811	3461	200 - 394	13213	Leu-8 to Gly-13, Arg-19 to Glu-24, Arg-36 to Gly-43, Gln-45 to Leu-52.	S0002: 2		
HMSIO76	767680	3462	111 - 410	13214		S0002: 2		
HMSIP13	792379	3463	193 - 465	13215	Ile-32 to Ser-37, Lys-55 to His-64.	H0457: 5, S0002: 1 and H0436: 1.		
HMSIP59	739275	3464	1 - 294	13216		H0265: 1 and S0002: 1.		
HMSIS02	920078	3465	330 - 1	13217	Asn-1 to Asn-7, Pro-11 to Gln-16.	S0002: 1 and H0423: 1.		
HMSIT63	745068	3466	150 - 329	13218		H0069: 1 and S0002: 1.		
HMSIT73	708077	3467	76 - 222	13219	Val-1 to Ser-8, Pro-19 to Trp-25.	S0002: 2		
HMSIU50	706363	3468	29 - 178	13220	Glu-1 to Gly-8, Lys-20 to Val-49.	S0002: 2		
HMSIV17	712318	3469	286 - 519	13221		S0002: 2		
HMSJA36	685633	3470	158 - 256	13222		H0083: 1 and S0002: 1.		
HMSJA69	745227	3471	223 - 336	13223		S0002: 2		
HMSJB02	920065	3472	225 - 566	13224	Ser-31 to Ala-44.	S0002: 3		
HMSJB64	969637	3473	69 - 308	13225		S0002: 1 and S0426: 1.	17	
HMSJB83	781172	3474	107 - 316	13226	Pro-1 to Phe-9, Ser-43 to His-50.	S0002: 2		
HMSJB93	676414	3475	144 - 359	13227	Thr-6 to Lys-15.	S0002: 2		
HMSJE47	928252	3476	81 - 230	13228		S0002: 1 and S0426: 1.		
HMSJE52	868167	3477	96 - 335	13229	Glu-32 to Gly-41.	S0002: 2		
HMSJE69	513164	3478	609 - 307	13230		H0457: 3 and S0002: 1.		
	855775	9574	229 - 471	19326	Arg-49 to Trp-56.			
HMSJH79	760667	3479	211 - 432	13231	Ala-3 to Arg-26.	S0002: 1 and H0445: 1.		
HMSJ122	674557	3480	3 - 230	13232		H0179: 1 and S0002: 1.		
HMSJ124	928152	3481	306 - 467	13233	Thr-1 to Val-6.	H0370: 1, H0318: 1 and S0002: 1.		
HMSJ183	781094	3482	320 - 177	13234	Ser-12 to His-18.	S0002: 2 and S0053: 2.		
HMSJL41	922753	3483	1 - 114	13235		H0370: 1 and S0002: 1.		
HMSJM33	702408	3484	74 - 424	13236	Asp-13 to His-22, Pro-41 to Lys-46.	S0002: 2		

HMSJO36	708084	3485				Pro-83 to Leu-88.				
				13237		Leu-13 to Glu-26.			S0002: 3	
HMSJO44	716600	3486		13238		Arg-7 to Leu-14, Ser-31 to Gln-37, Glu-44 to Ser-56, Gly-79 to Lys-87, Ala-92 to Arg-99, Pro-116 to Gln-127.			S0002: 1 and H0436: 1.	
HMSJR07	854106	3487		13239		Leu-11 to Thr-22.			H0075: 1, S0002: 1 and L0363: 1.	
HMSJR27	855760	3488		13240					L0749: 2, H0264: 1 and S0002: 1.	
HMSJR41	967070	3489		13241		Asp-6 to Thr-12.			S0002: 2	
HMSJR74	710402	3490		13242		Thr-1 to Val-18.			H0556: 2, H0265: 1 and S0002: 1.	
HMSJT11.	965007	3491		13243		Gln-15 to Val-23.			S0002: 3, L0777: 3, L0598: 2, L0521: 2, L0794: 2, L0731: 2 and L0768: 1.	
HMSJT60	733379	3492		13244		Asn-13 to Pro-19, Ser-34 to Phe-41.			S0002: 2	
HMSJT70	756465	3493		13245		Ala-4 to Leu-10.			S0116: 1 and S0002: 1.	
HMSJT79	954141	3494		13246		Arg-63 to Ser-72.			S0002: 3	
HMSJU28	686664	3495		13247					S0002: 2	
HMSJV67	751602	3496		13248		Leu-31 to Leu-37, Ser-57 to Trp-66, Thr-83 to Phe-95.			S0002: 2	
HMSJW12	902568	3497		13249		Arg-15 to Tyr-26, Asn-56 to Lys-63, Cys-90 to Leu-95, Ser-129 to Gly-134, Pro-137 to Glu-143.			S0002: 1 and S0426: 1.	
	970011	9575		19327						
	970012	9576		19328		Arg-15 to Tyr-26, Asn-56 to Lys-63, Cys-90 to Leu-95.				
HMSJW19	744990	3498		13250		Arg-27 to Pro-32.			AR089: 9, AR061: 4	

HMSJW25	678096	3499	337 - 546	13251	Trp-1 to Ser-15, Gln-23 to Gly-29.	S0002: 1 and S0426: 1. H0589: 1 and S0002: 1.	
HMSJZ11	861381	3500	259 - 468	13252		S0344: 1 and S0002: 1.	
HMSKB02	920056	3501	203 - 436	13253	Pro-16 to Trp-24.	S0002: 2	
HMSKB24	855883	3502	32 - 208	13254		S0002: 3	
HMSKC56	733388	3503	197 - 409	13255	Glu-13 to Glu-21.	S0002: 2	
HMSKC66	783028	3504	129 - 338	13256	Ser-28 to Cys-33.	S0002: 2	
HMSKC90	675055	3505	2 - 178	13257		S0002: 3	
HMSKF32	699273	3506	142 - 237	13258		S0002: 2	
HMSKF62	966084	3507	1 - 249	13259	Arg-10 to Ala-17.	H0556: 1 and S0002: 1.	
HMSKG23	675885	3508	3 - 170	13260	His-14 to Ser-27.	S0002: 2	
HMSKI08	959413	3509	70 - 522	13261		H0581: 1 and S0002: 1.	
HMSKQ60	495734	3510	525 - 274	13262		H0271: 1 and S0002: 1.	
	953525	9577	107 - 346	19329	Lys-43 to Met-49.		
HMSKS66	413201	3511	90 - 266	13263		S0002: 2	
HMSKU36	966289	3512	3 - 386	13264	Thr-14 to Thr-20, Asn-92 to Lys-99, Arg-120 to Arg-128.	S0002: 2 and H0543: 1.	
HMSKU90	920151	3513	385 - 648	13265	His-69 to Arg-78.	S0002: 1, S0052: 1 and S0428: 1.	
HMSKZ29	690662	3514	274 - 50	13266	Lys-8 to Ser-13.	H0318: 1 and S0002: 1.	
HMSLB94	773812	3515	187 - 330	13267		S0002: 2	
HMSME83	950970	3516	251 - 523	13268		H0271: 1 and S0426: 1.	
HMSMF12	948393	3517	286 - 456	13269		S0426: 2 and H0580: 1.	
HMSMG02	915179	3518	8 - 226	13270	Ser-30 to Phe-38, Pro-46 to Ala-56.	S0426: 2	
HMSMH05	931095	3519	109 - 318	13271		S0053: 2 and S0426: 1.	
HMSMI12	969636	3520	60 - 359	13272		S0426: 2	
HMSMK12	841898	3521	466 - 326	13273	Gly-29 to Phe-39.	S0426: 1 and S0216: 1.	
HMSML27	870008	3522	124 - 279	13274		H0272: 1 and S0426: 1.	
HMSMN04	926746	3523	42 - 113	13275		S0426: 2	
HMSMN23	932548	3524	358 - 639	13276	Arg-2 to Thr-9.	H0179: 1, S0426: 1 and L0748: 1.	
HMSMQ05	931022	3525	29 - 109	13277		S0426: 2	

HMSMV92	934140	3526	291 - 515	13278			S0426: 2		
HMSMX68	861333	3527	233 - 424	13279	Ser-48 to Leu-56.		H0402: 2 and S0426: 2.		
HMSNA44	861293	3528	171 - 629	13280	His-13 to Lys-23, Asp-33 to Gly-39.		S0426: 2	22q13.31	250100, 250800, 250800
HMSNR30	968716	3529	260 - 382	13281			T0002: 1, S0426: 1 and L0748: 1.		
HMSNR92	861314	3530	126 - 488	13282	Thr-30 to Arg-36, His-43 to Ser-50, Ser-69 to Leu-75, Ala-80 to Gly-94.		S0426: 2		
HMSNX38	974321	3531	412 - 597	13283			S0426: 1 and H0521: 1.		
HMSOA29	953329	3532	164 - 361	13284	Glu-28 to Glu-35, Arg-44 to Pro-52.		S0002: 2, S0134: 1 and S0426: 1.		
HMSOA34	936036	3533	390 - 605	13285	Pro-6 to Pro-15.		S0114: 1 and S0426: 1.		
HMSOB43	961779	3534	103 - 204	13286	Gln-10 to Tyr-27.		H0255: 1, H0306: 1 and S0426: 1.		
HMSOC76	916807	3535	153 - 251	13287	Tyr-1 to Lys-9.		H0402: 1 and S0426: 1.		
HMSOE03	922858	3536	282 - 413	13288			S0426: 1 and H0422: 1.		
HMSOG57	861298	3537	270 - 530	13289	Tyr-1 to Ser-9.		S0426: 2 and L0748: 1.		
HMSOM08	958216	3538	2 - 247	13290	Pro-29 to Arg-34, Lys-68 to His-73.		H0063: 1 and S0426: 1.		
HMSON02	918397	3539	330 - 136	13291			S0140: 1, S0426: 1 and L0369: 1.		
HMSON77	861288	3540	625 - 407	13292			S0426: 2		
HMSOO10	963389	3541	526 - 356	13293			S0114: 1 and S0426: 1.		
HMSOP01	915083	3542	35 - 211	13294	Gln-50 to Val-55.		S0426: 2 and S0002: 1.		
HMSOQ75	959856	3543	3 - 257	13295	Ala-9 to Phe-15.		H0250: 1 and S0426: 1.		
HMSOU16	948198	3544	2 - 253	13296			H0179: 1, S0002: 1 and S0426: 1.		
HMSOU92	947760	3545	268 - 74	13297			AR089: 10, AR061: 5 S0426: 2 and L0596: 2.		
	948130	9578	564 - 262	19330					
HMSOV17	835834	3546	311 - 508	13298			S0426: 1, L0748: 1 and H0543: 1.		
HMSOW85	827823	3547	79 - 312	13299	His-8 to Gly-18, Ser-64 to His-77.		H0341: 1 and S0426: 1.		

HMSOX47	948202	3548	56 - 541	13300	His-8 to Gly-18, Asp-31 to Arg-37, Ala-70 to Pro-75, Arg-115 to Val-122.	S0426: 2		
HMSOY61	836082	3549	13 - 249	13301		S0426: 1 and H0521: 1.		
HMSOZ02	918388	3550	417 - 115	13302	Ser-12 to Phe-26, Ser-84 to Arg-96.	L0749: 4, L0748: 2, L0731: 2, H0657: 1, S0426: 1, L0777: 1 and H0423: 1.		
HMSOZ19	958680	3551	183 - 290	13303		S0426: 2 and H0591: 1.		
HMSPA04	922863	3552	136 - 345	13304	Lys-1 to Lys-26, Lys-33 to Asp-44.	S0426: 2		
HMSPA09	948209	3553	3 - 161	13305	Lys-18 to Ser-24, Pro-38 to His-44, Gln-46 to Cys-53.	S0002: 1 and S0426: 1.		
HMSPA41	951971	3554	66 - 638	13306	Ala-17 to Gly-25, Thr-27 to Gly-40, Pro-46 to Pro-66, Pro-77 to Pro-85, Pro-88 to Ala-106.	S0426: 1 and H0542: 1.		
HMSPB03	922853	3555	243 - 392	13307	Arg-1 to Arg-8, Val-12 to Gly-18, Ala-36 to Pro-50.	S0426: 3		
HMSPB63	861264	3556	434 - 604	13308		S0002: 1 and S0426: 1.		
HMSPE92	948104	3557	53 - 238	13309	His-8 to Gly-18, Gly-31 to Ser-38, Met-54 to Ser-61.	H0305: 1 and S0426: 1.		
HMVAJ53	728009	3558	3 - 401	13310		S0212: 1 and H0318: 1.	5q34	109690, 109690, 123101, 180071, 600584
HMVAL74	684574	3559	395 - 532	13311	Lys-1 to Thr-6.	S0212: 1 and H0255: 1.		
HMVAT26	789064	3560	1 - 174	13312	Pro-53 to Cys-58.	S0212: 1 and H0422: 1.		
HMVAW08	962197	3561	178 - 267	13313		S0212: 2	7q22-q31	126650, 126650, 154276, 164860, 173360, 173360, 180105, 222800, 246900, 274600,

HMVAY55	574215	3562	1 - 240	13314	Gln-1 to Gly-17, Arg-27 to Glu-35, Gly-41 to Gly-50, Pro-59 to Arg-74.	H0271: 2, L0747: 2, S0212: 1, L0788: 1, H0521: 1 and L0740: 1.	5q12-q13	274600, 602081, 602136, 602136, 602136, 602447
HMVBA36	698060	3563	113 - 304	13315	Glu-15 to Lys-26, Asn-37 to Thr-64.	S0212: 1 and H0421: 1.		126060, 143200, 143200, 181510, 253200, 268800, 268800, 600354, 600354, 600887
HMVBD70	735696	3564	86 - 277	13316	Ser-3 to Glu-12, Ser-48 to Phe-53.	S0212: 1 and H0580: 1.		
HMVBD84	782910	3565	38 - 268	13317		S0212: 1 and H0612: 1.		
HMVBO01	916072	3566	1 - 336	13318	Ser-5 to His-11.	L0777: 2, S0212: 1, H0402: 1, L0055: 1 and L0603: 1.		
HMVBO34	735873	3567	970 - 764	13319	Ser-1 to Asp-8.	S0114: 1, S0212: 1 and L0769: 1.		
HMVBUD26	681408	3568	162 - 341	13320	Leu-15 to Ser-20.	S0212: 1, H0486: 1, L0659: 1 and L0757: 1.		
HMVBV30	861196	3569	123 - 272	13321	Arg-9 to Arg-23.	S0212: 1, T0071: 1 and L0750: 1.		
HMVBW94	883659	3570	2 - 214	13322	Ala-9 to Pro-18.	S0212: 2		
HMVCG47	719936	3571	317 - 412	13323	His-4 to His-10.	S0212: 2		
HMVCO55	868146	3572	2 - 232	13324	Met-8 to Gly-13, Glu-19 to Cys-26.	S0212: 2		
HMVCR47	661425	3573	340 - 459	13325		S0212: 2		
HMVCT75	715950	3574	2 - 151	13326		S0212: 1 and H0318: 1.		
HMVCX10	963828	3575	289 - 474	13327	Tyr-11 to Gln-20.	S0212: 2 and L0756: 1.		
HMVCY46	662311	3576	252 - 371	13328		S0212: 2		
HMVCZ64	767714	3577	130 - 315	13329	Pro-17 to Trp-23.	S0212: 2		
HMVDA11	861185	3578	3 - 215	13330	Arg-1 to Met-6, Asn-31 to Ser-37.	S0212: 2		
HMVDA30	691608	3579	40 - 204	13331		S0212: 1 and H0423: 1.		
HMVDF10	970480	3580	3 - 362	13332	Lys-45 to Val-61, Ser-78 to Arg-88.	S0212: 1 and H0581: 1.		

HMVDF66	915638	3581	3 - 104	13333	Leu-1 to Trp-20.	S0212: 2 and S0002: 1.		
HMVDF83	701907	3582	103 - 285	13334	Met-1 to His-26, Tyr-54 to Phe-60.	S0212: 2		
HMVDG76	861179	3583	1 - 183	13335		S0212: 2		
HMVDH06	934778	3584	34 - 126	13336		S0212: 4, H0580: 1 and L0604: 1.		
HMVDI38	709243	3585	533 - 697	13337		L0748: 5 and S0212: 2.		
HMVDI75	710475	3586	357 - 557	13338		S0212: 2		
HMVDR49	722581	3587	196 - 381	13339		H0271: 2 and S0212: 1.		
HMVDT07	952488	3588	226 - 462	13340	Pro-53 to Thr-60.	S0212: 2 and L0750: 1.		
HMVDU16	904807	3589	1120 - 1341	13341	Pro-22 to Ser-28, Thr-43 to Lys-74.	AR050: 16, AR051: 2, AR089: 2, AR061: 1, AR054: 1 L0748: 4 and S0212: 2.		
HMVDW09	625070	3590	3 - 320	13342	Arg-16 to Leu-22, Pro-60 to Pro-67.	S0212: 2		
HMVDZ70	878247	3591	1 - 873	13343	Arg-1 to Arg-6, Gln-39 to Ile-45, Ser-48 to Tyr-55, Glu-103 to Thr-114, Arg-132 to Ala-150, Glu-167 to Gln-175.	S0212: 2		
HMVEA91	774609	3592	112 - 2	13344	Arg-1 to Tyr-7.	S0212: 2		
HMVEF33	701908	3593	69 - 338	13345	Ile-31 to Gln-37.	S0212: 2		
HMVBH72	750931	3594	2 - 304	13346	Leu-8 to Glu-15, His-23 to Ala-36, Pro-38 to Gly-43, Arg-68 to Asp-76.	S0212: 2		
HMWBE16	527509	3595	140 - 256	13347	Lys-2 to Tyr-10.	H0341: 2		
HMWBG29	890878	3596	105 - 263	13348	Pro-4 to Ser-9.	H0341: 2, L0606: 1, H0521: 1 and L0748: 1.		
HMWBI47	527593	3597	80 - 340	13349	Gly-19 to Gly-26.	H0341: 4	14q32.1	107280, 107280, 107400, 107400, 122500, 186960, 245200, 601841
HMWBK07	954098	3598	3 - 56	13350	Thr-11 to Lys-18.	H0341: 2		

HMWBK24	524357	3599	3 - 161	13351	Pro-3 to Ala-14.	H0341: 1 and S0053: 1.		
HMWBM09	967687	3600	2 - 124	13352	Lys-18 to Ser-23, Gly-28 to Ile-37.	H0341: 2		
HMWBN56	745698	3601	2 - 289	13353	Gly-43 to Pro-51.	H0341: 1 and S0278: 1.		
HMWBO07	839560	3602	44 - 250	13354	Cys-19 to Glu-26, His-63 to Tyr-69.	H0341: 2		
HMWBR86	731650	3603	61 - 192	13355		H0556: 1 and H0341: 1.	7q22-q31.1	126650, 126650, 150240, 154276, 173360, 173360, 180105, 222800, 246900, 602136, 602136, 602136, 602447
HMWBV45	861152	3604	150 - 317	13356		H0341: 3		
HMWCG29	723779	3605	86 - 226	13357		H0341: 2		
HMWCQ09	924634	3606	48 - 338	13358	Pro-7 to Gly-21, Ser-57 to Lys-63, Ser-91 to Gln-97.	H0341: 1, H0402: 1 and H0069: 1.		
HMWCQ58	738372	3607	3 - 125	13359		H0341: 1 and H0521: 1.		
HMWCV08	960083	3608	2 - 301	13360	Ala-37 to Arg-48.	H0341: 1 and S0002: 1.		
HMWCX60	531395	3609	3 - 104	13361	Tyr-27 to Cys-32.	H0341: 2		
HMWDD54	932261	3610	80 - 457	13362		H0341: 2		
HMWDD75	800023	3611	2 - 184	13363		H0341: 1 and H0090: 1.		
HMWDF88	906769	3612	147 - 362	13364	Trp-14 to Asp-27.	AR061: 207, AR089: 155 H0341: 1 and H0083: 1.		
HMWDH23	676216	3613	2 - 142	13365		H0341: 2		
HMWDL52	921603	3614	10 - 327	13366	Pro-37 to Phe-51, Arg-63 to Leu-68, Arg-71 to Ser-77.	H0341: 2		
HMWDQ83	558021	3615	119 - 289	13367	Lys-1 to Asp-14.	H0341: 2		
HMWDW60	712083	3616	1 - 315	13368	Pro-16 to Leu-23, His-26 to His-31, Pro-34 to Thr-50, Pro-53 to Ala-68, Lys-71 to Ser-79, Asn-84 to Gly-90.	H0341: 1 and H0486: 1.		



HMWDY93	573513	3617	168 - 332	13369			H0341: 2		
HMWDZ73	573754	3618	121 - 234	13370			H0341: 1 and H0318: 1.		
HMWDZ77	573494	3619	1 - 138	13371		Asp-9 to Gly-15, Ser-34 to His-42.	H0341: 2 and L0542: 1.		
HMWEE04	709334	3620	3 - 326	13372			H0341: 2		
HMWEG24	781017	3621	317 - 478	13373			H0341: 1 and H0318: 1.		
HMWEJ73	767384	3622	3 - 374	13374		His-1 to Lys-13, Glu-19 to Lys-40, Glu-42 to Ala-65, Pro-71 to Thr-92.	H0341: 2		
HMWEK11	967362	3623	561 - 824	13375		Gly-26 to Ser-34.	H0271: 2, H0341: 1 and L0438: 1.		
HMWEK39	573604	3624	81 - 248	13376		Arg-1 to Gly-6.	H0341: 2		
HMWEM85	783973	3625	179 - 322	13377			H0341: 2		
HMWEP07	953749	3626	1 - 819	13378			L0747: 2, H0341: 1, H0543: 1 and H0423: 1.		
HMWES31	861129	3627	89 - 316	13379			H0341: 2		
HMWFC21	752826	3628	2 - 376	13380		Gly-1 to Tyr-18, Pro-20 to Trp-26, Leu-31 to Met-39, Arg-63 to Leu-75.	H0341: 2 and H0543: 1.		
HMWFE01	917150	3629	1 - 135	13381		Trp-3 to Ser-9.	H0341: 2		
HMWFH47	738220	3630	36 - 485	13382			H0341: 1, T0041: 1 and L0748: 1.		
HMWFI54	573598	3631	38 - 274	13383		Ser-29 to Trp-35.	H0341: 2		
HMWFO10	954979	3632	1 - 189	13384			H0556: 1 and H0341: 1.		
HMWFP33	702618	3633	1 - 213	13385			H0341: 2 and L0803: 1.		
HMWFP60	576880	3634	134 - 325	13386		Asn-4 to Val-10.	H0341: 1 and S0053: 1.		
HMWFAQ91	573551	3635	3 - 263	13387		Lys-1 to Lys-6.	H0341: 2		
HMWFR11	967371	3636	127 - 2	13388			H0341: 1 and H0543: 1.		
HMWFO05	861119	3637	106 - 312	13389			H0341: 1 and H0306: 1.		
HMWFO85	659578	3638	299 - 418	13390		Phe-5 to Gly-10.	H0591: 3, H0543: 2, H0341: 1, L0657: 1 and L0759: 1.		
HMWFW75	727236	3639	2 - 112	13391			H0341: 1 and H0423: 1.		
HMWGC08	959838	3640	110 - 262	13392			H0341: 2		

HMWGF22	861104	3641	27 - 311	13393		H0341: 3			
HMWGG55	920575	3642	2 - 172	13394	Gln-2 to Tyr-28.	H0341: 2	12q13	107777, 123940, 139350, 139350, 148040, 148041, 148043, 148070, 231550, 600194, 600231, 600536, 600808, 600956, 601284, 601769, 601769, 601928, 602116, 602153	
HMWKG95	576885	3643	109 - 255	13395	Pro-12 to Thr-20.	H0341: 2			
HMWQG80	575822	3644	207 - 365	13396	Pro-16 to Pro-32, Asp-39 to His-44.	L0748: 3, L0754: 2, H0341: 1 and H0402: 1.			
HMWGT07	953454	3645	2 - 520	13397	Arg-9 to Trp-16.	H0341: 1 and H0090: 1.			
HMWGU64	823460	3646	227 - 427	13398	Trp-31 to Arg-37, Gly-46 to His-52.	H0341: 2	9p13	230400, 250250	
HMWGV63	576854	3647	2 - 130	13399		H0341: 2			
HMWGX38	709249	3648	89 - 256	13400	Trp-1 to Ser-8, Ile-21 to Leu-32, Ala-46 to Lys-56.	H0341: 2	1q21-q22	104770, 107670, 110700, 135940, 145001, 146790, 152445, 152445, 159001, 159440, 159440, 159440, 174000, 179755, 182860, 182860, 182860, 186780, 191030, 191315, 230800, 230800, 266200, 600897, 600923, 601105, 601412, 601652, 602491	
HMWGX50	959293	3649	311 - 745	13401		H0341: 2			
HMWHA91	684346	3650	104 - 247	13402		H0341: 2			
HMWHB03	861108	3651	189 - 374	13403	Arg-9 to Ser-14.	H0341: 2			

HMWHF58	584538	3652	248 - 418	13404		H0341: 2		
HMWHM30	676413	3653	106 - 333	13405		H0341: 1 and H0272: 1.		
HMWHN70	851334	3654	22 - 354	13406	Ala-12 to Ser-19, His-44 to Tyr-53, Leu-74 to Glu-88.	H0341: 3		
HMWHS25	678166	3655	25 - 321	13407	Thr-51 to Glu-60, Ser-65 to Asn-75.	H0265: 1 and H0341: 1.		
HMWHZ50	724431	3656	281 - 508	13408		H0341: 2		
HMWIA18	424132	3657	1 - 225	13409		H0341: 1 and H0521: 1.		
HMWIF10	964707	3658	345 - 82	13410	Ser-1 to Ala-6, Lys-12 to Gly-17, Cys-25 to Ile-33.	H0305: 2, L0749: 2, H0341: 1 and L0759: 1.		
HMWIL67	791275	3659	2 - 253	13411	Cys-5 to Gly-19, Thr-28 to Leu-35, Ala-37 to Lys-44.	L0745: 3, H0341: 1, L0746: 1 and H0444: 1.		
HMWTM26	681845	3660	127 - 249	13412		H0341: 2		
HMWIQ47	653198	3661	86 - 325	13413	Ser-49 to Gln-54.	H0341: 2 and S0052: 1.		
HMWIS96	746475	3662	420 - 692	13414	Gly-16 to Gly-27.	H0556: 3 and H0341: 1.		
HMWIT95	793450	3663	3 - 413	13415	Leu-7 to Gly-13, Leu-35 to Val-41, Ala-52 to Gln-66, Glu-72 to Leu-87, Trp-125 to Asp-130.	H0341: 1 and H0402: 1.	15q22	102578, 109700, 151670, 154550, 601780
HMWTU48	917690	3664	2 - 451	13416	Ala-1 to Ile-11, Gly-27 to Gly-33, Arg-40 to Arg-47, Pro-76 to Trp-81, Arg-121 to Gly-126, Gly-129 to Cys-138, Gln-141 to Phe-148.	H0341: 1, H0264: 1 and L0748: 1.	1q21	104770, 107670, 110700, 135940, 145001, 146790, 152445, 152445, 159001, 174000, 179755, 182860, 182860, 182860, 191315, 230800, 230800, 266200, 600897, 601105, 601412, 601652, 602491
HMWTV48	795649	3665	40 - 171	13417		H0341: 1, H0306: 1 and		

									H0580: 1.			
HMWIX21	670972	3666	82 - 213	13418	Ser-1 to Phe-11, Gln-32 to Arg-37.				H0341: 1, H0090: 1 and L0779: 1.			
HMWIZ03	924227	3667	79 - 264	13419	Pro-35 to Pro-40, Ser-51 to Leu-61.				H0341: 1, H0264: 1 and S0002: 1.			
HMWJB29	668700	3668	137 - 352	13420					H0341: 2			
HMWJC76	688926	3669	99 - 287	13421					H0341: 2			
HMWJF10	964705	3670	3 - 353	13422	Pro-7 to Ala-14, Pro-34 to Gly-39.				H0341: 2			
HMWJG85	918724	3671	2 - 424	13423	Ala-1 to Gly-8, Thr-11 to Gly-18, Asp-23 to Asn-30.				H0341: 1, H0609: 1, H0271: 12q23-q24.1 1, H0521: 1 and L0581: 1.		124200, 147440, 160781, 181405, 235800, 261600, 261600, 600175, 601406, 601620, 601621	
HMWJH15	757807	3672	106 - 204	13424					H0341: 2			
HMXAA03	964494	3673	1 - 72	13425					H0552: 2			
HMXAA08	959267	3674	11 - 172	13426	Pro-26 to Ser-36.				H0552: 4			
HMXAA39	670501	3675	42 - 224	13427	Arg-21 to Arg-37.				H0552: 4, L0761: 3, H0583: 2, H0556: 1, H0650: 1, L0785: 1, S0002: 1, L0655: 1, H0445: 1 and H0543: 1.			
HMXAA56	733331	3676	3 - 56	13428					H0552: 5			
HMXAB21	714384	3677	2 - 97	13429					H0552: 4			
HMXAB69	661849	3678	1 - 150	13430					H0552: 6			
HMXAC70	964492	3679	5 - 151	13431					H0552: 12			
HMXAC83	780385	3680	1 - 117	13432	Pro-8 to His-21.				AR054: 5, AR051: 2, AR050: 1 H0552: 4			
HNEAB76	674781	3681	73 - 174	13433					H0179: 1, H0063: 1 and S0426: 1.			
HNEAC51	523767	3682	3 - 272	13434	Pro-74 to Gly-79.				H0179: 3, L0749: 2 and L0791: 1.			
HNEAJ21	671370	3683	21 - 125	13435	Leu-1 to Lys-10.				H0179: 1 and H0542: 1.			
HNEAJ57	735083	3684	106 - 258	13436					H0486: 1 and H0179: 1.			
HNEAK41	711557	3685	72 - 239	13437	Lys-6 to Asn-12.				H0179: 1 and S0002: 1.			

HNEAN61	507302	3686	3 - 173	13438	Lys-15 to Thr-26.	H0179: 1 and S0002: 1.		
HNEAN85	524222	3687	148 - 300	13439	Gln-26 to Gln-42.	H0305: 2, H0306: 1, H0402: 1, H0580: 1, H0179: 1, S0052: 1, S0428: 1, S0053: 1, S0031: 1 and H0444: 1.		
HNEBI66	529168	3688	3 - 263	13440	Gly-4 to Gly-11.	H0179: 1 and H0087: 1.		
HNEBJ08	958742	3689	192 - 410	13441		AR051: 76, AR054: 73, AR050: 42, S0218: 1, H0179: 1 and S0428: 1.		
HNEBJ35	529576	3690	60 - 182	13442	Ile-3 to Gly-8.	H0179: 1 and H0543: 1.		
HNEBJ48	919274	3691	380 - 529	13443	Gln-1 to Arg-11, Pro-13 to Gly-22.	H0179: 1 and H0445: 1.		
HNEBM07	954173	3692	1 - 171	13444	Gly-1 to Pro-9.	H0075: 1 and H0179: 1.		
HNEBY19	527894	3693	142 - 294	13445		H0179: 2		
HNEBY26	527891	3694	62 - 331	13446		H0179: 2		
HNEBY30	523571	3695	99 - 254	13447	Ile-6 to Gln-24, Thr-31 to Asp-52.	H0179: 2		
HNEBY32	527889	3696	178 - 339	13448		H0179: 2		
HNEBY34	507211	3697	2 - 316	13449		H0179: 2		
HNEBY44	773793	3698	72 - 227	13450		H0179: 2		
HNEBY46	527887	3699	252 - 386	13451	Gln-3 to Ser-9, Cys-18 to Trp-27, Pro-34 to Pro-39.	H0179: 2		
HNEBY48	527895	3700	68 - 322	13452		H0179: 2		
HNEBY71	527883	3701	1 - 258	13453	Gly-1 to Ser-9, Ser-18 to Glu-23.	H0179: 2		
HNECD65	861062	3702	27 - 308	13454	Asp-1 to Gly-7.	S0114: 1 and H0179: 1.		
HNECE07	954094	3703	84 - 212	13455		L0774: 2, H0402: 1 and H0179: 1.		
HNECE14	927590	3704	2 - 106	13456		H0179: 1 and H0264: 1.		
HNECF59	507208	3705	1 - 114	13457	Lys-10 to Val-17.	H0179: 2		
HNECF76	506532	3706	52 - 288	13458		H0179: 1 and H0063: 1.		
HNECI57	529873	3707	1 - 168	13459		H0179: 1 and H0271: 1.		
HNECK47	720588	3708	13 - 174	13460		H0486: 1 and H0179: 1.		

HNECK66	932501	3709	1 - 228	13461	Arg-16 to Val-24, Pro-27 to Arg-34, Gln-37 to Leu-42.	S0114: 1 and H0179: 1.		
HNECK67	527100	3710	270 - 410	13462		S0052: 2, H0179: 1 and L0375: 1.		
HNECK83	935045	3711	18 - 332	13463	Ser-16 to Gly-22, Arg-37 to His-45, Val-56 to Arg-64.	H0585: 10, H0141: 2, H0556: 1, H0656: 1 and H0179: 1.		
HNECL71	527810	3712	65 - 235	13464		H0179: 2		
HNECM64	861031	3713	2 - 274	13465	Ala-1 to Ser-8.	H0179: 2		
HNECO69	861068	3714	24 - 137	13466		H0179: 2		
HNECR93	529868	3715	3 - 299	13467		H0271: 2 and H0179: 1.		
HNECS77	527511	3716	326 - 490	13468	Trp-37 to Glu-43.	H0436: 2, S0114: 1 and H0179: 1.		
HNECT70	958356	3717	2 - 193	13469		H0179: 1 and S0428: 1.		
HNECV31	466977	3718	53 - 304	13470	Pro-10 to Glu-15.	H0179: 2 and H0521: 1.		
HNECV66	575633	3719	151 - 336	13471		H0179: 2 and H0271: 1.		
HNECW09	968378	3720	61 - 189	13472		H0179: 2		
HNECW20	527508	3721	200 - 505	13473		H0179: 2		
HNECW35	855430	3722	1 - 423	13474	Pro-6 to Met-11.	H0179: 3, S0114: 1 and H0581: 1.		
HNECX77	507305	3723	88 - 363	13475	Val-21 to Pro-39, Thr-57 to Ser-64, Pro-83 to Gln-92.	H0179: 1 and H0271: 1.	19q13.1	164731, 172400, 172400, 180901, 180901, 221770, 248600, 600918, 602716
HNEDD27	527589	3724	189 - 389	13476		H0179: 2		
HNEDD80	507186	3725	49 - 336	13477		H0179: 2		
HNEDD90	789187	3726	307 - 173	13478	Asp-38 to Met-44.	H0255: 1 and H0179: 1.		
HNEDE48	721895	3727	78 - 263	13479		H0580: 1 and H0179: 1.		
HNEDE59	527060	3728	10 - 276	13480	Ser-5 to Phe-18, Asp-28 to Glu-43.	H0179: 3		
HNEDF71	572390	3729	33 - 134	13481		H0421: 1 and H0179: 1.		
HNEGD11	967643	3730	94 - 219	13482	Ser-5 to Gly-19.	H0265: 1 and H0179: 1.		
HNEGD35	790570	3731	27 - 233	13483		H0421: 1 and H0179: 1.		

HNEDG56	746708	3732	163 - 339	13484	Leu-13 to Gly-20.	H0179: 2	
HNEDH54	527505	3733	56 - 289	13485	Cys-18 to Cys-24.	H0179: 1 and H0271: 1.	
HNEDH96	697747	3734	436 - 573	13486		H0179: 1 and H0444: 1.	
HNEDI80	573138	3735	117 - 365	13487	Arg-40 to Thr-47.	H0179: 2	
HNEDK04	923910	3736	1 - 153	13488		H0179: 2 and H0271: 1.	
HNEDK16	702570	3737	3 - 446	13489	His-1 to Trp-8, Ala-31 to Leu-37, Pro-39 to Pro-50, Ser-54 to Ser-73.	AR051: 13, AR054: 10, AR050: 2 H0179: 2 and H0271: 1.	
HNEDK22	527503	3738	192 - 377	13490		S0114: 1 and H0179: 1.	
HNEDK74	765880	3739	84 - 203	13491		H0657: 1, H0179: 1 and H0264: 1.	
HNEDN42	527499	3740	1 - 192	13492	Gly-27 to Lys-32, Ser-45 to Pro-53.	H0179: 2	
HNEDO95	573136	3741	57 - 233	13493	Pro-34 to Pro-45.	H0179: 2	
HNEDQ51	527816	3742	32 - 196	13494		H0179: 2	
HNEDQ68	586485	3743	764 - 925	13495		AR050: 7, AR054: 3, AR051: 1 H0542: 2, H0318: 1, H0179: 1 and L0527: 1.	
HNEDR48	683470	3744	35 - 166	13496	Gln-36 to Gly-41.	H0402: 1 and H0179: 1.	
HNEDS03	925091	3745	1 - 126	13497	Leu-7 to Gly-12.	H0179: 2	
HNEDS18	954586	3746	153 - 4	13498	Arg-1 to Arg-7.	H0179: 3	
HNEDS29	703032	3747	1 - 147	13499		H0580: 1 and H0179: 1.	
HNEDU01	909832	3748	156 - 416	13500		H0179: 1 and S0002: 1.	
HNEEA41	868102	3749	1 - 189	13501		H0265: 1, H0650: 1 and H0179: 1.	
HNEEB62	573185	3750	149 - 295	13502	Met-17 to Trp-26.	H0179: 2	
HNEEB84	781940	3751	1 - 225	13503		H0179: 1 and H0521: 1.	
HNEEC81	844318	3752	108 - 320	13504		H0179: 2	
HNEDD12	893698	3753	403 - 531	13505	Ser-34 to Gln-43.	H0179: 1 and S0428: 1.	
HNEDD48	668747	3754	329 - 577	13506	Ser-14 to Ile-21.	L0748: 2, H0556: 1, H0457: 1, H0179: 1 and L0455: 1.	
HNFAA13	667712	3755	203 - 472	13507	Glu-6 to Gly-24, Cys-35 to His-46.	H0271: 1 and H0436: 1.	

HNFAA80	781578	3756	100 - 288	13508	Phe-11 to Gln-20.	H0318: 1, H0271: 1 and H0444: 1.	
HNFAA83	530295	3757	34 - 135	13509	His-1 to Gln-7.	H0271: 2	
HNFAA95	784714	3758	374 - 739	13510		L0746: 3, H0436: 2, L0745: 2 and H0271: 1.	
HNFAE07	861069	3759	2 - 136	13511		H0179: 1 and H0271: 1.	
HNFAF40	861021	3760	2 - 208	13512	Pro-19 to Leu-27.	H0271: 2	
HNFAAG69	530349	3761	2 - 175	13513	Pro-4 to Arg-16, Tyr-36 to Asn-42.	H0271: 2	
HNFAH45	662053	3762	33 - 308	13514	Lys-1 to Val-7.	H0271: 2	
HNFB51	530064	3763	96 - 218	13515	Ser-32 to Pro-39.	H0271: 2	
HNFBT11	967784	3764	8 - 232	13516		H0271: 2	
HNFBUS3	861015	3765	100 - 360	13517		H0255: 1 and H0271: 1.	
HNFCI32	699706	3766	3 - 137	13518		H0271: 1 and S0052: 1.	
HNFCI41	861014	3767	271 - 546	13519	Glu-2 to Pro-9.	S0474: 1 and H0271: 1.	
HNFCI77	761390	3768	171 - 440	13520	Asn-10 to His-16.	H0271: 1 and H0444: 1.	
HNFCI68	585328	3769	2 - 121	13521	Pro-1 to Leu-16.	H0271: 2	
HNFC504	927836	3770	64 - 297	13522		L0766: 3, H0271: 1, S0052: 1, L0779: 1 and L0731: 1.	
HNFCI27	529964	3771	3 - 185	13523	Ala-6 to Lys-11.	H0271: 2	
HNFCI67	927833	3772	119 - 229	13524		H0271: 2	
HNFCW14	955293	3773	2 - 193	13525		H0179: 1, H0271: 1 and S0002: 1.	
HNFCY33	861005	3774	168 - 401	13526		H0486: 1 and H0271: 1.	
HNFD021	529867	3775	166 - 312	13527		H0271: 2	
HNFD091	496241	3776	7 - 294	13528	Gly-61 to Gly-68.	H0271: 1 and S0053: 1.	
HNFDJ17	960239	3777	1 - 201	13529		H0271: 2 and L0600: 2.	
HNFDK40	854017	3778	315 - 488	13530		H0179: 1, H0271: 1 and H0444: 1.	
HNFDN04	537317	3779	232 - 426	13531	His-42 to Asn-49.	L0740: 2, H0271: 1 and H0264: 1.	
HNFDN41	712571	3780	212 - 388	13532	Leu-10 to Asp-15, Glu-27 to Lys-33.	H0271: 3 and H0264: 1.	
HNFDN89	787085	3781	1 - 186	13533		H0271: 1 and H0264: 1.	
HNFD081	537341	3782	119 - 244	13534		H0271: 2	



HNFD084	575347	3783	126 - 437	13535			H0271: 2	
HNFD09	719215	3784	2 - 265	13536			H0271: 1 and S0052: 1.	
HNFD35	527500	3785	72 - 221	13537			H0179: 1, H0271: 1 and L0667: 1.	
HNFD83	537343	3786	93 - 278	13538			H0271: 2	
HNFDV41	537337	3787	1 - 201	13539		Gly-1 to Val-9, Gln-19 to Gln-28, Leu-33 to Gly-38, His-46 to Arg-56.	H0271: 2	
HNFD22	537334	3788	1 - 93	13540		Pro-13 to Ser-18.	H0271: 2	
HNFD43	583458	3789	13 - 336	13541		Arg-54 to Pro-64.	L0794: 2, L0805: 2, L0789: 2, H0271: 1, L0803: 1, L0774: 1, L0776: 1, S0053: 1 and L0589: 1.	
HNFE43	583459	9579	581 - 441	19331		Arg-21 to Arg-30.	H0271: 3	
	424792	3790	188 - 343	13542		Leu-13 to Gly-18, Glu-29 to Trp-34.		
HNFE83	850982	3791	190 - 516	13543		Pro-1 to Ala-7, Leu-26 to Ser-35.	AR051: 12, AR054: 1, AR050: 1 H0580: 3, H0254: 2, H0521: 2, H0656: 1, H0457: 1, H0271: 1 and H0488: 1.	
HNFE95	971171	3792	227 - 469	13544		Lys-19 to Tyr-29, Ser-56 to Val-67.	H0271: 1 and S0052: 1.	
HNFE09	526641	3793	154 - 261	13545			H0179: 1 and H0271: 1.	
HNFE31	934595	3794	242 - 346	13546			H0271: 1, L0766: 1 and H0522: 1.	
HNFEH12	825406	3795	1 - 147	13547		Asp-29 to Cys-36.	H0271: 2	
HNFEI12	518245	3796	19 - 108	13548		Ala-14 to Ser-29.	H0271: 2	
HNFEK33	957396	3797	1 - 267	13549			H0637: 1 and H0271: 1.	
	971651	9580	911 - 759	19332		His-41 to Leu-51.		
HNFE76	860967	3798	136 - 375	13550			S0052: 3, H0271: 1 and H0521: 1.	
HNFE86	537336	3799	91 - 243	13551			H0271: 2	
HNFE20	669916	3800	15 - 389	13552		Ser-2 to Glu-10, Gly-12 to Gly-17.	H0271: 1 and S0053: 1.	

HNFE061	530355	3801	2 - 148	13553			H0271: 2	
HNFER89	787086	3802	152 - 370	13554	Gly-9 to Ser-28.		H0271: 1 and S0428: 1.	
HNFE44	860920	3803	2 - 274	13555	Pro-42 to Asp-47.		H0271: 2	
HNFEU62	574398	3804	1 - 87	13556			H0271: 2	
HNFEV41	575549	3805	1 - 87	13557			H0271: 2, L0768: 1 and L0794: 1.	
HNFEV66	575552	3806	1 - 111	13558	Gly-6 to Arg-11.		H0271: 2	
HNFFB21	671263	3807	134 - 439	13559			H0271: 1 and S0144: 1.	
HNFFC21	574693	3808	281 - 415	13560	Arg-4 to Ala-14.		H0271: 2 and H0556: 1.	
HNFFD88	577422	3809	59 - 220	13561	Asp-11 to Glu-17, Lys-24 to Gly-32.		H0271: 1 and H0416: 1.	
HNFF81	574678	3810	2 - 67	13562			H0271: 2	
HNFFG79	781693	3811	1 - 192	13563	Lys-12 to Val-17.		H0271: 2	
HNFFH03	921923	3812	45 - 185	13564	Gly-7 to Glu-16, Asp-34 to Glu-39.		L0439: 4, H0402: 1, H0271: 1, L0438: 1 and H0444: 1.	
HNFFH04	574679	3813	10 - 174	13565	Lys-14 to Asp-24.		H0271: 2 and H0486: 1.	
HNFFI48	860311	3814	2 - 238	13566			H0271: 1 and S0428: 1.	
HNFFK15	920748	3815	29 - 202	13567			H0271: 2	
HNFFK36	529978	3816	3 - 239	13568			H0271: 2	
HNFFK61	740644	3817	118 - 315	13569	Ala-1 to Lys-8, Gly-32 to Gly-37.		H0271: 3 and L0766: 1.	
HNFFM25	705856	3818	481 - 738	13570	Glu-6 to Val-14.		H0271: 2 and L0596: 1.	6
HNFFO61	742049	3819	20 - 343	13571			H0581: 1 and H0271: 1.	
HNFFO76	727306	3820	60 - 200	13572	Glu-3 to Pro-15, Leu-19 to Ser-26.		H0271: 1 and S0002: 1.	
HNFFR05	860851	3821	137 - 397	13573	Asp-38 to Arg-54.		H0271: 2	
HNFFR46	574618	3822	1 - 162	13574			H0271: 2	
HNFFS14	558192	3823	69 - 236	13575			H0271: 3	
HNFFS23	574677	3824	102 - 233	13576			H0271: 2	
HNFFS46	574669	3825	41 - 169	13577			H0271: 2	
HNFFS96	860904	3826	1 - 102	13578	Ser-14 to Gly-21.		H0271: 2	
HNFFT30	574616	3827	3 - 242	13579			H0271: 2	
HNFFT62	574623	3828	189 - 404	13580			H0271: 2	
HNFFT71	574617	3829	2 - 187	13581	Ala-1 to Arg-6.		H0271: 2	
HNFFT83	506711	3830	2 - 424	13582	Val-31 to Tyr-66.		H0271: 2	

HNFV05	932364	3831	112 - 264	13583	Gly-68 to Leu-73.	H0271: 3		
HNFV66	574153	3832	200 - 322	13584	Met-11 to Val-16.	H0271: 2		
HNFV73	574143	3833	94 - 267	13585		H0271: 2		
HNFEX21	574217	3834	190 - 321	13586	Ser-1 to Asp-11, Leu-13 to Gly-25.	H0402: 1 and H0271: 1.		
HNFEX55	574218	3835	195 - 461	13587	Asn-1 to Trp-7, Ala-14 to Pro-19, Val-30 to Ser-35.	H0271: 2		
HNFEX79	574152	3836	1 - 219	13588		H0271: 2		
HNFEX53	526845	3837	75 - 245	13589		H0271: 3		
HNFEX89	913701	3838	256 - 534	13590	Lys-1 to Glu-7, Asn-9 to Phe-14, Asn-71 to Ile-80.	H0271: 1, H0416: 1, L0758: 1 and H0543: 1.		
HNFEX91	860897	3839	59 - 235	13591	Lys-1 to Ile-13, Ser-21 to Arg-27.	AR050: 34, AR051: 30, AR054: 28 H0179: 1, H0271: 1, S0428: 1 and H0543: 1.		
HNFGB37	577342	3840	2 - 100	13592	Val-3 to Ser-13.	H0271: 1 and H0416: 1.		
HNFGB17	860899	3841	23 - 361	13593	Leu-35 to Ile-44, Tyr-57 to His-65, Ala-67 to Asn-72.	H0179: 1, H0271: 1, H0264: 1 and S0052: 1.		
HNFGB46	967538	3842	37 - 189	13594		H0271: 2		
HNFGB53	860900	3843	2 - 241	13595	Gly-40 to Glu-45.	H0271: 2 and L0749: 1.		
HNFGB57	782183	3844	249 - 434	13596	Asn-20 to Asp-26, Asn-34 to Ser-41.	H0271: 2, H0265: 1 and H0556: 1.		
HNFGB64	851981	3845	96 - 350	13597		H0486: 1 and H0271: 1.		
HNFGB16	781720	3846	1 - 129	13598	Glu-8 to Gly-17.	H0179: 1 and H0271: 1.		
HNFGB36	684992	3847	3 - 140	13599		H0271: 2 and L0581: 1.		
HNFGB83	526843	3848	3 - 140	13600		H0271: 2, H0581: 1 and H0543: 1.		
HNFGB24	524419	3849	178 - 324	13601		H0271: 1 and H0187: 1.		
HNFGB71	954601	3850	230 - 379	13602		H0179: 1 and H0271: 1.		
HNFGB01	921431	3851	2 - 481	13603	Gln-6 to Leu-23.	H0271: 2, L0761: 1, L0752: 1, L0755: 1 and L0596: 1.		
HNFGB49	909707	3852	3 - 299	13604	Arg-29 to Arg-34.	H0271: 2		

HNFGI84	783204	3853	2 - 130	13605			H0271: 2		
HNFGI93	526534	3854	2 - 199	13606		Glu-3 to Cys-21.	H0271: 2		
HNFGK28	574599	3855	158 - 334	13607		Glu-1 to Asn-10, Asn-29 to Lys-34, Asn-43 to Gly-48.	H0271: 2		
HNFGK29	574593	3856	41 - 235	13608			H0271: 2		
HNFGK39	574592	3857	1 - 237	13609		Ser-1 to Phe-6, Pro-22 to Arg-27, Glu-31 to Glu-36, Ser-42 to Arg-48.	H0271: 2		
HNFGI31	420241	3858	23 - 445	13610			H0402: 1 and H0271: 1.		
HNFGI94	709264	3859	1 - 150	13611		His-6 to Arg-12.	H0271: 2		
HNFGM40	524398	3860	127 - 357	13612		Pro-5 to Cys-11, Ser-25 to Ala-31, Pro-39 to Lys-44.	H0271: 2		
HNFGM61	750800	3861	3 - 170	13613		Ala-2 to Trp-7, Thr-10 to Leu-26.	H0271: 2	1q21-q25	104770, 107300, 107670, 110700, 131210, 135940, 136132, 145001, 146790, 150292, 152445, 152445, 159001, 173610, 174000, 179755, 182860, 182860, 182860, 191315, 208250, 230800, 230800, 233710, 266200, 600897, 600995, 601105, 601412, 601518, 601652, 602491
HNFGM76	908665	3862	1 - 507	13614		Ala-2 to Pro-8, Glu-13 to Pro-20, Gln-30 to His-51, Val-58 to His-64, Thr-71 to Arg-76.	AR089: 8, AR061: 6 L0761: 3, H0457: 2, L0769: 2, L0800: 2, L0794: 2, H0580: 1, H0271: 1, L0796: 1, L0803: 1, L0789: 1,		

						Ser-81 to Glu-94, Thr-101 to Phe-108, Arg-119 to His-126, Gln-139 to Gly-148, Ser-151 to Ser-159.	L0792: 1, L0777: 1 and L0731: 1.			
HNF GN36	575567	3863	67 - 327	13615	Thr-12 to His-29.	H0271: 3, L0766: 1, S0052: 1 and L0591: 1.				
HNF GN60	574588	3864	56 - 334	13616		H0271: 2				
HNF GP07	953915	3865	302 - 517	13617	Thr-42 to Pro-49.	H0271: 1 and H0542: 1.				
HNF GP31	574643	3866	42 - 125	13618		H0271: 1 and H0264: 1.				
HNF GP64	932413	3867	84 - 230	13619		L0766: 3, H0271: 2, H0306: 1 and H0402: 1.				
HNF GQ23	750597	3868	213 - 383	13620	Thr-22 to Phe-28.	H0580: 1 and H0271: 1.				
HNF GQ58	574583	3869	180 - 314	13621	Leu-1 to Ile-8.	H0271: 2				
HNF GU56	574587	3870	3 - 305	13622	Asn-3 to Ser-9, Ala-21 to Trp-29, Ser-51 to Trp-56, Arg-63 to Arg-68, Ile-89 to Pro-94.	H0271: 2				
HNF GW96	915309	3871	430 - 693	13623	Gln-10 to Tyr-17, Arg-19 to Gln-30, Lys-48 to Ala-54.	H0416: 2, L0439: 2, H0271: 1 and L0776: 1.				
HNF GX55	795918	3872	344 - 721	13624		H0271: 4, H0179: 1 and L0748: 1.	9q22	229600, 264300, 600542, 602014, 602088		
HNF GZ03	924695	3873	317 - 493	13625		H0271: 1 and S0052: 1.	19q13	109560, 205900, 600652, 600757		
HNF HA11	967520	3874	1 - 360	13626		AR089: 11, AR061: 8 H0271: 2				
HNF HD40	970875	3875	327 - 482	13627		H0271: 2 and H0444: 1.				
HNF HF18	666827	3876	313 - 191	13628	Leu-1 to Ser-8.	H0271: 2				
HNF HF32	699518	3877	3 - 323	13629	Ser-6 to Leu-12.	H0271: 2				
HNF HF33	574146	3878	153 - 314	13630		H0271: 2				
HNF HF53	574148	3879	170 - 322	13631	Arg-1 to Ser-7, Glu-9 to Asn-16.	H0271: 2				
HNF HG35	574684	3880	23 - 205	13632		H0271: 2				

HNFBH12	968808	3881	84 - 182	13633	Arg-2 to Asn-14.	H0271: 2		
HNFBH31	574697	3882	34 - 213	13634		H0271: 1 and H0090: 1.		
HNFBH33	574703	3883	180 - 362	13635		H0271: 1 and H0090: 1.		
HNFBH83	523646	3884	38 - 181	13636		H0271: 2		
HNFBH88	521932	3885	36 - 128	13637		H0179: 1 and H0271: 1.	19q13.3-q13.4	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 191044, 258501, 600040, 600138, 602225, 602225
HNFBH17	523569	3886	33 - 203	13638	Asn-4 to Gly-17.	H0271: 3		
HNFBH10	964802	3887	149 - 352	13639	His-10 to Ser-24, Gln-32 to Phe-55.	H0271: 3	19q13	109560, 205900, 600652, 600757
HNFBK07	953538	3888	11 - 208	13640	Ser-8 to Ile-16.	H0179: 1 and H0271: 1.		
HNFBK46	860844	3889	3 - 446	13641	His-1 to Asn-8, Ser-15 to Gln-22, Leu-27 to Arg-32.	H0271: 3		
HNFBK77	576186	3890	165 - 422	13642	Pro-38 to Lys-43.	AR061: 1, AR089: 0 H0271: 2		
HNFBK85	577324	3891	114 - 311	13643	Lys-1 to Gly-23.	S0428: 2, H0271: 1, L0770: 1, L0666: 1 and S0053: 1.		
HNFBM09	657247	3892	3 - 131	13644	Pro-6 to Gly-11.	H0271: 1, S0002: 1 and S0052: 1.		
HNFBM47	916624	3893	40 - 360	13645		L0771: 2, H0556: 1, H0657: 1, S0116: 1, H0402: 1, H0580: 1, S0278: 1, H0179: 1, H0271: 1, S0002: 1, L0752: 1 and S0196: 1.		
HNFBM58	674349	3894	3 - 134	13646		H0556: 1 and H0271: 1.		
HNFBM60	662643	3895	7 - 87	13647		H0585: 1 and H0271: 1.		
HNFBM03	860887	3896	165 - 272	13648		H0271: 2		
HNFBQ01	938114	3897	173 - 334	13649	Gln-1 to Trp-8.	H0271: 2 and S0428: 1.		
HNFBQ23	921950	3898	41 - 322	13650	Arg-60 to Lys-65.	H0271: 1, H0416: 1 and H0521: 1.		
HNFBQ32	765827	3899	111 - 323	13651	Pro-34 to Ser-44.	H0271: 2 and H0090: 1.		

HNHFHQ67	576147	3900	1 - 240	13652	Thr-59 to Arg-73.	H0271: 2	
HNFHR70	586494	3901	63 - 344	13653	Leu-10 to Glu-19.	H0271: 3 and H0179: 1.	
HNFHS84	725666	3902	171 - 383	13654	Asp-13 to Pro-27.	H0271: 1 and H0416: 1.	
HNFHS85	576118	3903	1 - 195	13655	His-6 to Val-11.	H0271: 1 and H0416: 1.	
HNFHU20	512927	3904	310 - 471	13656		H0271: 2	
HNFHU27	683506	3905	171 - 1	13657	Lys-28 to Glu-36, Lys-52 to Lys-57.	L0766: 2, H0341: 1 and H0271: 1.	
HNFHU85	506309	3906	164 - 376	13658		H0271: 2	
HNFHV81	766220	3907	59 - 400	13659	Ser-2 to Gly-11.	H0271: 2	
HNFW14	939763	3908	2 - 448	13660	Leu-9 to Met-15, Thr-25 to Cys-37, Glu-40 to Gly-45, Leu-109 to His-115.	AR061: 32, AR089: 21 H0271: 2	
HNFW40	577110	3909	3 - 314	13661	Pro-25 to Gln-33.	H0271: 1, H0063: 1 and L0750: 1.	
HNFW70	757261	3910	115 - 315	13662	Met-3 to Lys-15, Gly-39 to His-45.	H0486: 1 and H0271: 1.	
HNFW81	577329	3911	2 - 196	13663	Gly-1 to Asn-6, Met-17 to Phe-23, Thr-36 to Thr-52.	H0255: 1, H0271: 1, S0052: 1 and S0053: 1.	
HNFX24	934305	3912	335 - 589	13664	Pro-5 to Asn-14, Glu-20 to Thr-30.	H0271: 1, L0773: 1, L0363: 1, S0428: 1, L0748: 1 and L0749: 1.	
HNFX44	716852	3913	84 - 293	13665	Gly-2 to Gly-8.	H0457: 3, H0250: 1, H0179: 1, H0271: 1 and S0053: 1.	
HNFY29	860879	3914	2 - 583	13666	Glu-16 to Trp-34.	H0635: 1 and H0271: 1.	
HNFA33	861010	3915	2 - 223	13667	Thr-10 to Thr-15.	H0457: 1, H0179: 1, H0271: 1 and H0416: 1.	
HNFB47	523438	3916	230 - 319	13668		H0179: 2 and H0416: 1.	
HNFB67	577326	3917	125 - 33	13669	Phe-1 to Asn-12.	H0416: 1 and S0052: 1.	
HNFC22	577442	3918	86 - 352	13670	Pro-1 to Gly-11, Glu-19 to Ala-27, Gln-49 to Arg-63.	H0271: 1 and H0416: 1.	
HNFC43	707264	3919	226 - 363	13671	Arg-18 to Ser-25.	H0416: 1 and S0144: 1.	
HNFE18	576032	3920	2 - 166	13672	Cys-23 to Ala-29, Asn-33 to Leu-38.	H0416: 2	

HNFIG07	918389	3921	2 - 478	13673	Gly-50 to Glu-61, Pro-63 to Gln-79, Arg-98 to Ser-107, Pro-126 to Arg-137.	H0581: 1 and H0416: 1.		
HNFIH79	576143	3922	264 - 109	13674		H0416: 1 and H0422: 1.		
HNFIJ46	919275	3923	240 - 476	13675		H0416: 1 and H0445: 1.		
HNFIK03	921951	3924	3 - 194	13676		H0416: 1 and S0052: 1.		
HNFIK37	576151	3925	90 - 236	13677		H0416: 2		
HNFIK44	506258	3926	94 - 330	13678		H0416: 2		
HNFIK13	657201	3927	102 - 434	13679	Arg-47 to Lys-60, Arg-67 to Trp-73.	H0416: 2		
HNFIK16	661500	3928	272 - 111	13680	Pro-31 to Arg-36.	H0416: 1 and H0488: 1.		
	860869	9581	590 - 925	19333	Gln-51 to Thr-78, Lys-95 to Thr-100.			
	964396	9582	327 - 587	19334				
HNFIN33	702415	3929	160 - 333	13681	Lys-1 to Cys-6, Ser-14 to Ser-19.	H0271: 1 and H0416: 1.		
HNFIN60	740372	3930	183 - 443	13682	Pro-18 to Gly-23, Phe-33 to Ala-39, Pro-64 to Trp-79.	H0416: 2		
HNFIN67	574569	3931	3 - 326	13683	Pro-19 to Pro-30, Pro-46 to Ser-55.	H0305: 2, H0271: 1 and H0416: 1.		
HNFIN83	779925	3932	1 - 318	13684	Pro-11 to Val-35, Gln-44 to Leu-52, Gln-92 to Phe-103.	H0402: 1 and H0416: 1.		
HNFI027	573095	3933	74 - 373	13685	Lys-3 to Trp-10, Lys-12 to Phe-17, Ser-32 to Ser-39, Cys-64 to Gln-71, Ala-73 to Asp-78.	H0271: 1, H0416: 1, S0052: 1 and S0053: 1.		
HNFI050	724374	3934	3 - 332	13686	Glu-8 to Ser-16, Ser-41 to Trp-46, Gly-50 to Gly-55, Leu-72 to Arg-80.	H0416: 1 and S0053: 1.		
HNFI082	921037	3935	1 - 210	13687	Ser-7 to Trp-22, Asn-30 to Arg-39.	H0271: 1 and H0416: 1.		



HNFIIP50	965283	3936	369 - 1067	13688	Pro-41 to Glu-46. Arg-1 to Trp-17, Ser-50 to Ser-56, Ser-74 to Ala-93, Gly-105 to Ser-116, Thr-177 to Leu-183.	H0656: 1 and H0416: 1.		
HNFIIP71	760366	3937	1 - 423	13689	Cys-6 to Thr-15, Asn-29 to Arg-34, Ala-49 to Ser-54, Pro-81 to Gly-86.	H0069: 1 and H0416: 1.		
HNFIQ17	768043	3938	183 - 440	13690	Pro-6 to Arg-17, Pro-62 to Gln-74.	H0271: 1, H0416: 1 and H0488: 1.		
HNFIQ74	765566	3939	2 - 136	13691	Glu-1 to Phe-13, Ser-17 to Trp-39.	H0271: 1 and H0416: 1.		
HNFIQ02	928109	3940	3 - 311	13692	Gln-1 to Ser-11, Cys-20 to Pro-26, Ala-30 to Arg-35, Pro-49 to Gly-57, Ser-72 to Cys-78, Pro-80 to Asp-86, Arg-96 to His-102.	H0416: 2		
HNFIQ32	848254	3941	161 - 472	13693	Arg-55 to Gln-61.	H0370: 1, H0416: 1 and H0436: 1.		
HNFIQ86	781175	3942	3 - 194	13694		H0271: 1 and H0416: 1.		
HNFIQ51	725648	3943	146 - 376	13695		H0416: 2		
HNFIQ31	697961	3944	1 - 90	13696		H0416: 1 and H0436: 1.		
HNFIQ07	953268	3945	100 - 321	13697	Pro-12 to Ala-27.	H0556: 1 and H0416: 1.		
HNFIQ14	967558	3946	2 - 166	13698	Ala-11 to Gly-21, Pro-41 to Gly-51.	H0271: 1 and H0416: 1.		
HNFIQ24	677178	3947	192 - 392	13699		H0271: 1 and H0416: 1.		
HNFIQ56	733363	3948	267 - 416	13700	Phe-19 to Lys-27.	H0416: 1 and S0002: 1.		
HNFIQ38	709265	3949	171 - 335	13701		H0416: 1, H0063: 1 and L0803: 1.		
HNFIQ73	764409	3950	3 - 242	13702	Asp-32 to Arg-48, Tyr-69 to Asn-74.	H0271: 1 and H0416: 1.		
HNFIQ62	740598	3951	172 - 354	13703	Asn-46 to Ala-61.	H0271: 1 and H0416: 1.		

HNFIZ47	720315	3952	3 - 188	13704			H0271: 1 and H0416: 1.		
HNFJA29	941525	3953	24 - 494	13705	Arg-9 to Leu-15, Cys-36 to Thr-43, Cys-102 to Trp-110, Lys-123 to Glu-128, Met-151 to Glu-157.		H0179: 2 and H0271: 2.		
HNFJA60	740362	3954	3 - 125	13706	Asn-1 to Asp-7.		H0271: 3		
HNFJA78	723390	3955	1 - 201	13707			H0271: 1 and H0264: 1.		
HNFJB80	752489	3956	219 - 392	13708	Leu-39 to Gly-44.		H0556: 1, H0271: 1 and H0543: 1.		
HNFJE30	574145	3957	1 - 243	13709			H0271: 2		
HNFJG33	702411	3958	5 - 181	13710	Asn-5 to Asp-12, Leu-15 to Trp-22.		H0271: 2		
HNFJG44	860847	3959	3 - 590	13711	Asp-1 to Ser-18, Ser-24 to Tyr-31, Glu-36 to Asp-41, Ile-49 to Leu-57, Glu-98 to Glu-103, Gln-118 to His-135, Gly-140 to Ala-146.		H0271: 1, H0063: 1 and L0439: 1.		
HNFJH59	738593	3960	263 - 472	13712	Arg-53 to Arg-60.		H0271: 1 and H0522: 1.		
HNFJH70	956187	3961	676 - 900	13713	Arg-2 to Thr-7.		S0053: 2, S0114: 1, S0116: 1, H0580: 1, H0179: 1, H0271: 1, H0090: 1, H0264: 1, L0805: 1, L0527: 1 and L0367: 1.		
HNGAC50	724666	3962	19 - 123	13714			H0402: 1 and S0052: 1.		
HNGAD53	527977	3963	1 - 225	13715			S0052: 2		
HNGAF45	526940	3964	5 - 295	13716	Gly-1 to Ala-11.		S0116: 2, L0667: 1, L0803: 1, S0052: 1, L0748: 1 and L0749: 1.		
HNGAH10	968271	3965	3 - 167	13717	Lys-11 to Thr-24.		S0052: 1 and S0216: 1.		
HNGAH27	573087	3966	152 - 271	13718	Gln-30 to Asp-35.		S0052: 2		
HNGAI23	676296	3967	197 - 367	13719	Pro-11 to Arg-21, His-43 to Lys-53.		S0052: 2		
HNGAI35	558467	3968	2 - 169	13720			S0052: 2		

HNGAJ10	860751	3969	54 - 230	13721	Arg-14 to Lys-23, Phe-37 to Thr-45.	S0052: 2	
HNGAJ82	577407	3970	2 - 214	13722		S0052: 2	
HNGAK12	660682	3971	3 - 248	13723	Gln-1 to Lys-8, Pro-33 to Ser-58.	H0090: 1 and S0052: 1.	
HNGAK70	860770	3972	3 - 344	13724	Arg-4 to Ile-11.	S0052: 2	
HNGAL51	531719	3973	102 - 233	13725	Ser-2 to Phe-11.	S0052: 2	
HNGAL84	573099	3974	180 - 1	13726	Gly-1 to Thr-11, Gly-55 to Asn-60.	S0052: 2	
HNGAL88	574666	3975	80 - 256	13727	Thr-22 to Ile-29.	S0052: 2	
HNGAL92	953889	3976	3 - 212	13728	Ser-26 to Phe-32, Val-34 to Arg-42.	S0052: 2	
HNGAN28	685436	3977	2 - 115	13729		S0052: 2	
HNGAN78	577412	3978	127 - 444	13730	Pro-80 to Ser-88.	S0278: 1 and S0052: 1.	
HNGAO40	660305	3979	69 - 170	13731	Ala-25 to Gly-33.	S0052: 1 and S0053: 1.	
HNGAP18	666852	3980	127 - 333	13732	Asp-7 to Val-15, Arg-18 to Glu-26.	S0052: 2	
HNGAP59	916323	3981	2 - 166	13733	Pro-3 to Gln-8.	S0144: 1 and S0052: 1.	
HNGAQ54	574647	3982	3 - 164	13734	Arg-46 to Arg-54.	S0052: 2	
HNGAR83	574470	3983	3 - 290	13735		S0052: 2	
HNGAS51	773208	3984	21 - 218	13736		S0052: 1 and S0216: 1.	
HNGAU59	860839	3985	3 - 89	13737		S0052: 2	
HNGAU65	925692	3986	1 - 249	13738	Cys-5 to Ser-11, Pro-37 to Gly-42.	S0052: 1 and S0053: 1.	
HNGAV04	506589	3987	268 - 444	13739		S0052: 2	
HNGAV25	574671	3988	103 - 285	13740	Thr-29 to His-34.	S0052: 2	
HNGAV53	573092	3989	15 - 257	13741	Asn-1 to Cys-6, Glu-16 to Ser-25, Leu-41 to Lys-49, Val-70 to Gln-79.	S0052: 2	
HNGAV79	574661	3990	117 - 383	13742		S0052: 3	
HNGAV84	574651	3991	3 - 107	13743		S0052: 2	
HNGAV88	860753	3992	217 - 453	13744	Gly-1 to Glu-7.	S0052: 2	
HNGAW25	574645	3993	84 - 284	13745	Ser-1 to Asn-6, Arg-11 to Thr-23.	S0052: 2	

HNGAW40	711454	3994	2 - 229	13746			S0052: 2		
HNGAX82	507313	3995	22 - 258	13747			H0271: 1 and S0052: 1.		
HNGAZ49	715380	3996	1 - 216	13748		Gly-41 to Arg-46, Pro-59 to Pro-65.	H0402: 1, L0365: 1 and S0052: 1.		
HNGBB06	936080	3997	2 - 271	13749		Thr-24 to His-35.	S0052: 2, L0742: 1 and L0748: 1.		
HNGBC50	868082	3998	907 - 1395	13750		Gly-26 to Thr-36, His-88 to Lys-103.	AR050: 7, AR054: 3, AR051: 1 S0052: 4		
HNGBE26	684761	3999	227 - 373	13751		Pro-6 to Lys-13.	S0052: 2		
HNGBF41	571331	4000	99 - 371	13752		Ser-15 to Lys-20, Ala-28 to Lys-33.	S0052: 2 and S0216: 1.		
HNGBF80	574475	4001	1 - 132	13753			S0052: 2		
HNGBG20	860739	4002	57 - 218	13754		Glu-2 to Asn-17, Gln-31 to Ala-36.	S0052: 2		
HNGBG50	577364	4003	1 - 219	13755			S0052: 1 and S0053: 1.		
HNGBH04	574469	4004	138 - 28	13756			S0052: 2		
HNGBH77	577361	4005	115 - 243	13757			S0052: 2		
HNGBI10	968246	4006	1 - 165	13758			S0052: 2		
HNGBI35	574403	4007	10 - 114	13759			S0052: 2		
HNGBI70	781978	4008	2 - 442	13760			S0052: 2		
HNGBI88	574409	4009	86 - 343	13761			S0052: 2		
HNGBI95	785983	4010	2 - 127	13762			S0052: 2		
HNGBJ40	948741	4011	373 - 576	13763		Glu-1 to Gln-7, Leu-13 to Gln-20, Lys-32 to Gly-39.	S0052: 2 and S0428: 1.		
HNGBJ84	573072	4012	1 - 180	13764		Lys-1 to Lys-11.	S0052: 2		
HNGBJ96	574474	4013	3 - 122	13765			S0052: 2		
HNGBN36	526808	4014	216 - 437	13766		Arg-8 to Leu-30, Ala-32 to Leu-37.	S0052: 3		
HNGBO34	932408	4015	227 - 373	13767			S0052: 2		
HNGBP21	671258	4016	2 - 208	13768			H0250: 1, S0052: 1, L0754: 1 and L0581: 1.		
HNGBP28	421816	4017	1 - 213	13769			S0052: 2		
HNGBP35	526806	4018	1 - 75	13770		Gly-1 to Asn-7,	S0052: 3 and S0426: 1.		

HNGBQ20	859846	4019	227 - 526	13771	Ser-15 to Phe-20.			
HNGBQ75	573047	4020	83 - 253	13772	Val-1 to Tyr-12.		S0052: 1 and S0216: 1.	
HNGBS88	575561	4021	86 - 247	13773			S0052: 2	
HNGBT44	574400	4022	153 - 281	13774	Ser-44 to Arg-52.		S0052: 2	
HNGBT58	577325	4023	200 - 337	13775	Ala-1 to Arg-17.		S0052: 2	
HNGBT72	579064	4024	169 - 285	13776	His-12 to Thr-20, Ile-34 to Tyr-39.		S0052: 2	
HNGBU15	574467	4025	71 - 151	13777			S0052: 2	
HNGBV67	574468	4026	2 - 148	13778			S0052: 2	
HNGBW63	574466	4027	3 - 131	13779	Lys-9 to Ser-18.		S0052: 2	
HNGBX64	574472	4028	1 - 108	13780			S0052: 2	
HNGBZ16	667293	4029	220 - 318	13781	Gln-9 to Lys-14.		S0052: 2	
HNGBZ17	575717	4030	292 - 450	13782			S0052: 2 and S0428: 1.	
HNGBZ20	812895	4031	21 - 176	13783	Gln-24 to Glu-32, Ser-41 to Trp-50.		S0052: 2	
HNGBZ55	573069	4032	143 - 256	13784			S0052: 2 and L0800: 1.	
HNGBZ92	574464	4033	2 - 151	13785			S0052: 2	
HNGCA47	574465	4034	2 - 205	13786			S0052: 2 and S0216: 1.	
HNGCA61	574461	4035	4 - 219	13787	Arg-4 to Arg-10, Arg-27 to Pro-44.		S0052: 2	
HNGCB44	674670	4036	158 - 289	13788	Gln-18 to Asp-24.		S0052: 1 and S0053: 1.	
HNGCC47	926947	4037	1 - 144	13789	Trp-11 to Leu-17, Pro-20 to Pro-28, Ala-32 to Gly-48.		S0052: 1 and S0428: 1.	
HNGCD08	959963	4038	22 - 177	13790	Cys-16 to Arg-28, Cys-30 to Asn-40.		S0052: 1 and S0216: 1.	
HNGCE85	970738	4039	2 - 154	13791			S0052: 2	
HNGCF09	527972	4040	2 - 100	13792			S0052: 2	
HNGCF28	574397	4041	3 - 113	13793	His-1 to Asn-7.		S0052: 2	
HNGCG83	868075	4042	236 - 403	13794			S0052: 2	
HNGCH05	932404	4043	183 - 335	13795	Leu-1 to Asn-6, Ser-23 to Glu-28, Ser-36 to Gln-44.		H0063: 1, S0052: 1, L0748: 1, L0745: 1 and L0749: 1.	
HNGCI02	920722	4044	14 - 214	13796	Thr-37 to Pro-44.		S0052: 1 and S0428: 1.	

HNGCI11	967513	4045	2 - 223	13797	Phe-20 to Leu-26.	S0052: 1 and S0053: 1.	
HNGCI17	526807	4046	56 - 226	13798	Leu-1 to Ser-7.	S0052: 2	
HNGCI53	825377	4047	61 - 270	13799	Gly-18 to Ala-23, Pro-31 to Leu-41, Pro-57 to Glu-67.	S0052: 2	
HNGCI69	574456	4048	3 - 278	13800	Thr-68 to Thr-81.	S0052: 2	
HNGCK34	706561	4049	78 - 206	13801	Pro-21 to Ser-31.	S0052: 1 and S0053: 1.	
HNGCK82	796479	4050	38 - 142	13802	Asn-1 to Thr-6.	S0052: 2	
HNGCK93	574458	4051	151 - 276	13803		S0052: 2	
HNGCL31	571332	4052	154 - 408	13804	Ser-6 to Pro-12, Ser-22 to Lys-30.	S0052: 2 and L0758: 1.	
HNGCL55	574453	4053	3 - 167	13805	Phe-1 to Arg-11, Asp-34 to Asn-42.	S0052: 2	
HNGCM05	932409	4054	2 - 139	13806	Glu-10 to Arg-15.	S0052: 1 and S0053: 1.	
HNGCO37	708694	4055	101 - 409	13807	Phe-16 to Ser-39.	S0052: 2	
HNGCO45	573055	4056	22 - 255	13808	Tyr-2 to Ser-8.	S0052: 2	
HNGCO86	779203	4057	152 - 3	13809		S0052: 1 and S0428: 1.	
HNGCQ37	708698	4058	1 - 258	13810	Gly-26 to Pro-32.	S0052: 2	
HNGCU24	574339	4059	67 - 138	13811		S0052: 2	
HNGCU70	574340	4060	3 - 155	13812	Val-1 to Glu-10, Pro-38 to Trp-43.	S0052: 2	
HNGCW38	574463	4061	115 - 321	13813	Gln-19 to Pro-25.	S0052: 2 and S0428: 1.	
HNGCW81	577253	4062	236 - 346	13814	Lys-7 to Gln-16.	L0766: 1, S0052: 1 and H0445: 1.	
HNGCW82	574344	4063	134 - 307	13815	Lys-1 to Ser-14, Lys-38 to Tyr-43.	S0052: 2	
HNGCW83	574338	4064	3 - 113	13816	Arg-1 to Gly-7, Val-9 to Gly-17.	S0052: 2	
HNGCX07	953900	4065	3 - 287	13817	Lys-55 to Glu-63.	S0052: 2	
HNGCY37	952203	4066	81 - 428	13818	Lys-19 to Gly-28, Glu-37 to Gly-57, Ser-81 to His-99.	S0052: 1 and S0428: 1.	
HNGCY41	806055	4067	36 - 143	13819		S0052: 1 and S0428: 1.	
HNGCY43	574392	4068	1 - 258	13820	Lys-17 to Lys-23, Glu-40 to Trp-46.	S0052: 2	

HNGCY59	959967	4069	112 - 297	13821	Lys-8 to Gly-18, Ser-31 to Asp-50, Pro-55 to Gly-60.	L0766: 3, S0052: 2, L0598: 1, L0659: 1 and L0759: 1.	
HNGCZ13	660916	4070	34 - 240	13822	His-4 to Gln-10, Lys-31 to Ala-37.	S0052: 2	
HNGDA09	574454	4071	1 - 156	13823	Ser-1 to Arg-20, Pro-32 to Phe-38.	S0052: 2	
HNGDA56	574452	4072	18 - 260	13824	Pro-1 to Thr-10, Pro-17 to Pro-23.	S0052: 2	
HNGDB25	784836	4073	96 - 296	13825	His-48 to Thr-53, Pro-55 to Gln-61.	S0052: 1 and S0428: 1.	
HNGDB65	526852	4074	81 - 260	13826		S0052: 2	
HNGDD30	573021	4075	94 - 273	13827	Leu-16 to Asn-22.	S0052: 2	
HNGDD39	709270	4076	9 - 164	13828		S0052: 2	
HNGDD73	764596	4077	264 - 464	13829		S0052: 2	
HNGDE07	953858	4078	2 - 133	13830	Arg-5 to Gly-10, Val-17 to Trp-29, Arg-31 to Val-36.	S0052: 2	
HNGDE31	794124	4079	125 - 244	13831		H0580: 1 and S0052: 1.	
HNGDF48	723368	4080	3 - 161	13832	Gly-16 to Pro-22.	S0052: 2	
HNGDF72	766217	4081	135 - 269	13833	Arg-35 to Pro-40.	S0052: 2	
HNGDG86	577237	4082	59 - 259	13834	Thr-1 to Phe-8, Cys-12 to Gln-17.	S0052: 2	
HNGDH09	573022	4083	118 - 264	13835		S0052: 2	
HNGDH37	917254	4084	70 - 183	13836		S0052: 2	
HNGDH52	914629	4085	3 - 242	13837	Gln-26 to Trp-41.	H0556: 1, H0650: 1, H0250: 1 and S0052: 1.	
HNGDH96	573060	4086	77 - 265	13838	Cys-48 to Asn-58.	S0052: 2 and S0428: 1.	
HNGDK17	860684	4087	3 - 365	13839	His-1 to Gly-16.	S0052: 2	
HNGDK41	574559	4088	223 - 387	13840	Ser-11 to Asn-21, Pro-23 to Met-32.	S0052: 2	
HNGDL32	935842	4089	61 - 369	13841	Ser-1 to Leu-7, Ser-26 to Tyr-35.	S0052: 2	
HNGDL72	574451	4090	1 - 66	13842		S0052: 2	
HNGDL93	927582	4091	46 - 108	13843		S0052: 2	

HNGDOI7	973285	4092	240 - 629	13844	Gly-23 to Pro-31, His-40 to Met-55.	H0416: 1 and S0052: 1.	
HNGDP10	968221	4093	2 - 178	13845		S0052: 2	
HNGDP13	574484	4094	2 - 121	13846	Ala-1 to Tyr-7, Pro-17 to Asn-25.	S0052: 2	
HNGDP27	574482	4095	278 - 445	13847		S0052: 2 and L0666: 1.	
HNGDP29	574488	4096	150 - 413	13848	Pro-16 to Gln-22.	S0052: 2	
HNGDP30	574480	4097	195 - 365	13849	Met-35 to His-42.	S0052: 2	
HNGDP71	574481	4098	157 - 360	13850		S0052: 2	
HNGDP74	860669	4099	51 - 500	13851		S0052: 2	
HNGDP89	574478	4100	133 - 261	13852		S0052: 2	
HNGDP95	574477	4101	2 - 190	13853	Gly-2 to Phe-10, Pro-29 to Ser-34.	S0052: 2	
HNGDR19	953672	4102	65 - 388	13854	Gln-11 to Ala-16, Pro-34 to Ser-41, Leu-74 to Thr-80.	S0052: 2	
HNGDR42	657404	4103	53 - 181	13855	Ser-2 to Ser-9, Thr-26 to Cys-36.	S0052: 2	
HNGDR79	572904	4104	92 - 262	13856		S0052: 2	
HNGDR81	572901	4105	2 - 124	13857		S0052: 2	
HNGDR88	860666	4106	198 - 323	13858	Asn-8 to Met-14.	S0052: 2	
HNGDS04	572909	4107	3 - 263	13859	His-1 to Pro-8, Glu-16 to Pro-42, Phe-63 to Lys-76, Pro-78 to Asp-87.	S0052: 2	
HNGDS59	576763	4108	28 - 114	13860	Gln-19 to Gly-24.	S0052: 5	
HNGDS96	796488	4109	1 - 408	13861	Arg-23 to Tyr-29, Gly-36 to Gly-43.	S0052: 1 and S0428: 1.	
HNGDT36	572895	4110	3 - 290	13862	His-1 to His-6, Arg-21 to Trp-30, Glu-40 to Ala-56, Thr-83 to Trp-89.	S0052: 2	
HNGDU45	722062	4111	16 - 372	13863	Pro-22 to Thr-28, Gly-35 to Cys-43.	S0052: 1 and S0053: 1.	
HNGDV22	572910	4112	41 - 280	13864		S0052: 2	
HNGDV25	573152	4113	128 - 259	13865		H0341: 1 and S0052: 1.	



HNGDV59	739407	4114	112 - 2	13866	Pro-2 to Ser-10, Ser-16 to His-21.	S0052: 2		
HNGDV96	796487	4115	192 - 446	13867		S0052: 1 and S0428: 1.		
HNGDW23	576773	4116	3 - 221	13868	Gly-9 to Arg-19, Thr-23 to Trp-31, Pro-37 to Arg-44, Lys-53 to Gly-59, Arg-65 to Ala-73.	S0052: 2		
HNGDW62	573162	4117	80 - 274	13869		S0052: 2		
HNGDW95	661943	4118	267 - 425	13870	Thr-25 to Glu-31.	H0421: 1 and S0052: 1.		
HNGDX50	860661	4119	23 - 142	13871	Thr-1 to Gly-18.	S0052: 2		
HNGDY12	870390	4120	289 - 552	13872		S0134: 1 and S0052: 1.		
HNGDY14	968042	4121	1 - 258	13873	Gln-7 to Thr-17.	S0052: 2		
HNGDY39	572908	4122	218 - 409	13874	Arg-17 to Cys-24, Pro-39 to Met-44.	S0052: 2 and S0428: 1.		
HNGDY92	920168	4123	3 - 212	13875	Lys-13 to Leu-26, Glu-61 to Arg-70.	S0052: 2		
HNGDZ52	572865	4124	221 - 361	13876	Asp-1 to Ser-9.	S0052: 2		
HNGEA44	572855	4125	2 - 118	13877		S0052: 2		
HNGEA82	778879	4126	1 - 177	13878	Gly-10 to Arg-21, Val-28 to Lys-37, Pro-54 to Tyr-59.	S0052: 1 and S0053: 1.		
HNGEA88	578911	4127	20 - 190	13879	Thr-23 to Leu-32.	S0052: 2		
HNGEB79	576743	4128	2 - 220	13880	Pro-25 to Ala-33, Lys-42 to His-48.	S0052: 2		
HNGEB81	572862	4129	12 - 242	13881	Ala-10 to Cys-16, Arg-33 to Trp-40.	S0052: 2		
HNGEB91	924912	4130	123 - 338	13882		S0052: 3		
HNGEC02	917530	4131	487 - 846	13883	Pro-7 to Gly-13, Gly-18 to Gly-38.	AR054: 9, AR051: 4, AR050: 0 H0556: 1 and S0052: 1.		
HNGEC06	935840	4132	2 - 157	13884	Ala-1 to Tyr-8.	S0052: 2		
HNGEC41	782294	4133	11 - 217	13885		S0052: 1 and S0216: 1.		
HNGEC43	573040	4134	258 - 374	13886	Gln-1 to Thr-7.	S0052: 2		
HNGEC44	806031	4135	162 - 359	13887		S0052: 1 and S0428: 1.		
HNGEC75	916809	4136	199 - 597	13888	Arg-1 to Trp-11,	S0053: 2, H0439: 1, L0809:		

HNGED03	924696	4137	2 - 259	13889	Pro-19 to Ser-33. Ala-1 to Arg-9, Ala-22 to Gln-33.	1, S0052: 1 and L0758: 1. S0052: 1 and S0428: 1.	
HNGED21	920156	4138	3 - 194	13890	Asp-29 to Gln-42.	S0052: 2	
HNGED77	572868	4139	95 - 277	13891	His-7 to Ser-12.	S0052: 2	
HNGED91	790309	4140	3 - 287	13892		S0052: 1 and S0428: 1.	
HNGEE18	573018	4141	1 - 207	13893	Val-16 to His-21, Ser-49 to Cys-59.	S0052: 2	
HNGEE39	573065	4142	1 - 306	13894	Pro-5 to Asn-10, Trp-24 to Ser-29, Met-58 to Arg-65, Ala-67 to Gly-72, Glu-78 to Glu-86.	S0052: 4	
HNGEF58	708692	4143	12 - 305	13895		S0052: 2	
HNGEG45	572880	4144	22 - 168	13896	Thr-37 to Gly-42.	S0052: 2	
HNGEG74	860685	4145	200 - 418	13897		S0052: 2	
HNGEG85	784431	4146	77 - 223	13898	Thr-20 to Tyr-26.	S0428: 2 and S0052: 1.	
HNGEG86	573049	4147	2 - 172	13899		S0052: 2	
HNGEI22	967310	4148	2 - 241	13900	Arg-2 to Lys-23, Gly-34 to Gly-45, Tyr-64 to Lys-69.	S0052: 2	
HNGEI47	720471	4149	142 - 453	13901		S0052: 2	
HNGEI04	932199	4150	53 - 253	13902		S0052: 2	
HNGEI22	573066	4151	1 - 195	13903	Glu-1 to Thr-11, Gly-27 to Gly-34, Leu-46 to His-53.	S0052: 3	
HNGEJ35	934987	4152	263 - 490	13904		H0318: 1 and S0052: 1.	
HNGEK30	572864	4153	47 - 202	13905	Lys-13 to Leu-22, Thr-26 to Lys-33.	S0052: 2	
HNGEK44	576745	4154	1 - 291	13906	Gly-1 to Asn-8, Ala-23 to Ala-34, Ile-80 to Trp-87.	S0052: 3	
HNGEK68	753159	4155	46 - 342	13907	Ser-1 to Lys-14, Gly-18 to His-30, Glu-35 to Lys-40.	S0052: 2	
HNGEL62	958363	4156	1 - 333	13908		S0052: 1, S0428: 1 and	

HNGEL92	572867	4157						L0748: 1.				
HNGEM38	573041	4158		152 - 373	13909			S0052: 2 and S0428: 1.				
				156 - 272	13910		Gln-1 to Ala-9, Cys-24 to Lys-31.	S0052: 2				
HNGEM53	860643	4159		42 - 272	13911		Pro-27 to Gly-34, Ser-37 to Arg-42.	S0052: 2				
HNGEN37	663955	4160		2 - 259	13912		Asn-9 to Arg-14, Asn-21 to Leu-26.	AR089: 1, AR061: 0 S0052: 2				
HNGEN45	572876	4161		204 - 362	13913		Ser-15 to Thr-21.	S0052: 2				
HNGEP55	732262	4162		1 - 273	13914		Gln-32 to Asn-39, Arg-67 to Ser-73.	S0052: 2				
HNGEP61	576749	4163		2 - 226	13915		Gln-10 to Ala-20, Thr-36 to Gly-43, Arg-69 to Ile-74.	S0052: 2				
HNGEP64	860631	4164		338 - 75	13916		Val-1 to Lys-12.	H0306: 1, H0402: 1, H0305: 1 and S0052: 1.				
HNGEP70	572858	4165		31 - 108	13917		His-1 to Asp-7.	S0052: 2				
HNGEP75	766574	4166		113 - 268	13918			S0052: 1 and S0053: 1.				
HNGEP77	861710	4167		145 - 366	13919		Gly-1 to Gly-9, Glu-67 to Arg-73.	H0271: 1, S0052: 1 and L0439: 1.				
HNGEP81	778161	4168		566 - 880	13920			S0052: 1, S0216: 1 and H0445: 1.				
HNGEQ07	953647	4169		44 - 349	13921		Ala-15 to Phe-23, Glu-35 to Gly-41.	S0052: 1 and S0216: 1.				
HNGEQ32	572984	4170		3 - 278	13922		Thr-7 to Gly-13.	H0341: 1, L0769: 1, L0789: 1, L0791: 1, S0052: 1 and L0777: 1.				
HNGEQ67	860687	4171		73 - 270	13923			S0052: 2 and S0428: 1.				
HNGER25	572873	4172		2 - 97	13924			S0052: 2				
HNGER43	699391	4173		97 - 204	13925			AR061: 3, AR089: 2 S0052: 3				
HNGER67	578903	4174		337 - 507	13926			S0052: 2				
HNGER82	945838	4175		226 - 546	13927		Asn-1 to Gly-6, Gln-23 to Gly-29.	AR061: 1, AR089: 1 L0748: 5, H0444: 2, H0402: 1, L0367: 1 and S0052: 1.				
HNGER84	586451	4176		116 - 319	13928			S0052: 2	2p22-p21		120435, 120435.	

										126600, 135300, 136435, 152790, 152790, 157170, 182601, 278300, 601071, 601771, 602134
HNGER96	922996	4177	3 - 362	13929					S0052: 1 and S0428: 1.	
HNGES56	733543	4178	2 - 265	13930					S0114: 1 and S0052: 1.	
HNGES59	490034	4179	381 - 524	13931			Ala-7 to Thr-12, Pro-37 to Gly-44.		S0114: 1, S0052: 1 and H0444: 1.	
HNGES89	573013	4180	1 - 240	13932			Glu-8 to Gln-15.		S0052: 2	
HNGET07	953618	4181	190 - 324	13933					S0052: 2	
HNGET31	506498	4182	67 - 219	13934					S0052: 2	
HNGET67	953529	4183	49 - 219	13935			Gln-11 to Cys-17, Phe-26 to Gly-34, Ala-45 to Phe-53.		S0052: 8	
HNGEU35	853582	4184	396 - 695	13936			Pro-29 to Thr-34, Ser-59 to Thr-66.		S0052: 2 and H0063: 1.	
HNGEU37	860626	4185	146 - 15	13937					S0052: 2	
HNGEV33	781207	4186	48 - 404	13938			Pro-7 to Ser-13.		S0052: 3	
HNGEV34	490914	4187	373 - 486	13939					H0255: 2 and S0052: 1.	
	537746	9583	468 - 620	19335			Lys-1 to Gly-9.			
HNGEV38	572882	4188	3 - 326	13940			His-1 to Arg-7, Arg-78 to Leu-83, Cys-87 to Gly-99.		S0052: 2	
HNGEV40	572894	4189	110 - 316	13941					S0052: 3	
HNGEV53	573090	4190	65 - 211	13942					S0052: 2	
HNGEV59	576750	4191	186 - 317	13943					S0052: 2	
HNGEV65	750391	4192	390 - 599	13944			Ile-54 to Gln-70.		L0748: 2, S0218: 1, S0052: 1, L0746: 1, L0749: 1 and L0608: 1.	
HNGEV70	573089	4193	1 - 141	13945					S0052: 2	
HNGEV75	506312	4194	103 - 258	13946			Arg-14 to Asp-23.		S0052: 2	
HNGEV86	789128	4195	2 - 103	13947			Thr-9 to Lys-15.		S0052: 1 and S0053: 1.	
HNGEV88	750542	4196	149 - 340	13948					S0052: 2	225500, 600593, 602363

HNGEW18	958328	4197	14 - 136	13949	Ser-11 to Tyr-16.	S0052: 1 and S0428: 1.	
HNGEW76	572874	4198	104 - 274	13950	Ile-44 to His-52.	S0052: 2	
HNGEX06	935838	4199	147 - 323	13951	Thr-1 to Phe-7, Ile-39 to Asn-45.	S0052: 3 and S0428: 1.	
HNGEX35	959230	4200	14 - 376	13952		S0052: 2	
HNGEX76	834919	4201	59 - 337	13953		H0179: 1 and S0052: 1.	
HNGEX95	572897	4202	124 - 327	13954		S0052: 2	
HNGEY41	973310	4203	123 - 293	13955		S0052: 2	
HNGEY50	676067	4204	2 - 154	13956		S0052: 2	
HNGEY60	920375	4205	1 - 171	13957	Val-21 to Gly-33, Glu-45 to Gly-50.	S0052: 2	
HNGEY80	790222	4206	256 - 426	13958	Ser-22 to Trp-31.	S0052: 2	
HNGEY84	752239	4207	188 - 481	13959	Glu-7 to Asn-15.	H0179: 1 and S0052: 1.	
HNGEZ45	574462	4208	79 - 333	13960	Glu-1 to Gln-18, Lys-46 to Lys-53.	S0052: 3	
HNGFA28	774277	4209	248 - 679	13961		S0052: 1 and S0216: 1.	
HNGFA39	424813	4210	41 - 478	13962	Thr-17 to Gly-30, Gly-32 to Val-38.	S0052: 2	
HNGFA41	952235	4211	148 - 2	13963		S0052: 1 and S0428: 1.	
HNGFA67	576719	4212	151 - 318	13964		S0052: 2	
HNGFA80	963490	4213	65 - 349	13965		S0052: 1 and S0428: 1.	
HNGFB08	959738	4214	3 - 131	13966		S0052: 2	
HNGFB52	573575	4215	1 - 339	13967	Gly-1 to Ala-15, Ala-17 to Ser-25, Pro-32 to Arg-44, Pro-55 to His-60.	H0305: 2 and S0052: 1.	
HNGFB57	868072	4216	129 - 263	13968	Pro-14 to Ser-21.	S0052: 2	
HNGFB74	573024	4217	2 - 136	13969	Pro-2 to Thr-11, Lys-22 to Leu-27.	S0052: 2	
HNGFC71	573160	4218	3 - 167	13970	Glu-25 to Trp-33, Leu-49 to Arg-55.	S0052: 1 and S0053: 1.	
HNGFD63	835997	4219	54 - 470	13971	Pro-10 to Ser-19, Ser-29 to Leu-47, Ala-60 to Gly-66.	S0052: 1 and S0053: 1.	
HNGFD75	823462	4220	1 - 366	13972		S0052: 2	

HNGFD85	783467	4221	118 - 351	13973	Lys-7 to Thr-20, Ser-28 to Gly-43.	S0052: 1 and S0428: 1.		
HNGFD96	968248	4222	40 - 285	13974		S0052: 2, L0742: 2 and L0592: 1.		
HNGFF35	805996	4223	194 - 451	13975	Pro-1 to Asn-10, Arg-23 to Cys-29.	S0052: 1 and S0428: 1.		
HNGFG22	573084	4224	91 - 261	13976	Gly-25 to Ser-35, Ser-44 to Val-49, Ser-51 to Asp-57.	AR061: 8, AR089: 3 S0052: 2		
HNGFG51	725787	4225	45 - 200	13977		H0305: 2 and S0052: 1.		
HNGFG57	860595	4226	40 - 339	13978	Arg-1 to Lys-8, Arg-60 to Trp-66, Leu-68 to Ile-74, Glu-82 to Gly-89.	S0052: 2 and L0748: 1.		
HNGFG69	926873	4227	1 - 315	13979	Pro-6 to Ser-13, Arg-19 to Gln-35, Thr-54 to Ala-61, His-73 to Cys-78.	S0052: 1 and S0428: 1.		
HNGFH94	966118	4228	262 - 393	13980	Lys-1 to Arg-15, Pro-17 to Asp-23, Pro-38 to Lys-44.	S0052: 1 and S0428: 1.		
HNGFI06	935828	4229	240 - 371	13981		S0052: 1 and S0428: 1.		
HNGFI20	578896	4230	90 - 332	13982	Gly-20 to Lys-26, Pro-40 to Lys-47.	S0052: 2		
HNGFI32	699398	4231	224 - 346	13983		H0255: 1 and S0052: 1.		
HNGFI81	578892	4232	202 - 381	13984		S0052: 2		
HNGFJ27	860591	4233	78 - 272	13985		S0002: 1 and S0052: 1.		
HNGFK28	544726	4234	1 - 756	13986	Glu-4 to Asn-15, Ser-104 to Gly-111, Leu-230 to Pro-237.	AR061: 6, AR089: 2 S0052: 3		
	566798	9584	1 - 756	19336	Glu-4 to Asn-15, Ser-104 to Gly-111, Leu-230 to Pro-237.			
	943114	9585	351 - 1	19337	Gln-1 to Ile-15, Leu-76 to Arg-82, Glu-90 to Thr-96.			

	943115	9586	3 - 530	19338	Glu-6 to Asn-17, Ser-106 to Gly-113.			
HNGFK44	860589	4235	46 - 177	13987		S0052: 2		
HNGFL04	572833	4236	1 - 153	13988	Ser-4 to Thr-12, Thr-23 to Thr-30.	S0052: 2		
HNGFM50	584729	4237	1 - 324	13989	Thr-2 to Arg-11, Asp-30 to Gly-35.	S0052: 2		
HNGFM74	578884	4238	471 - 310	13990	Glu-19 to Pro-24, Ser-49 to Thr-54.	H0583: 1, H0402: 1 and S0052: 1.		
HNGFM79	860585	4239	1 - 300	13991	Pro-35 to Ser-40, Thr-64 to Ser-70.	S0052: 2		
HNGFN21	572821	4240	2 - 205	13992	Ser-12 to Thr-19, Pro-58 to Gln-65.	S0052: 3, H0556: 1 and L0777: 1.		
HNGFN56	970740	4241	167 - 349	13993		S0052: 3		
HNGFN65	576698	4242	1 - 285	13994	Gln-21 to Gly-29, Pro-39 to Asn-44.	S0052: 2		
HNGFN96	770209	4243	170 - 295	13995		S0052: 2		
HNGFO46	935135	4244	3 - 215	13996	Pro-1 to Gly-6.	H0580: 2 and S0052: 1.		
HNGFO55	572856	4245	3 - 266	13997	Lys-16 to Arg-21, Leu-30 to Pro-35, Asn-48 to Gly-53, Ala-68 to Ser-78.	S0052: 2		
HNGFO81	526792	4246	69 - 263	13998	Pro-48 to Gly-55.	AR061: 2, AR089: 0 S0052: 2		
HNGFP02	920483	4247	11 - 205	13999	Lys-25 to Glu-36.	S0052: 2		
HNGFP08	959730	4248	2 - 376	14000	Gln-34 to Gly-39, Lys-70 to Gly-80.	S0052: 2		
HNGFP62	573052	4249	42 - 302	14001		S0052: 1 and S0053: 1.		
HNGFP80	931021	4250	109 - 372	14002		S0052: 2		
HNGFP93	707332	4251	187 - 360	14003	Asn-1 to Gln-9.	S0052: 3		
HNGFQ36	703715	4252	74 - 370	14004	His-1 to Gly-15.	H0580: 1 and S0052: 1.		
HNGFQ58	576715	4253	109 - 279	14005	Thr-22 to Asp-28, Glu-43 to Gly-49.	S0052: 2 and H0583: 1.		
HNGFR02	920482	4254	89 - 286	14006	Lys-8 to Lys-19, Glu-25 to Glu-34, Ala-38 to Gln-53.	S0052: 1 and S0428: 1.		

HNGFR16	573358	4255	37 - 303	14007			S0053: 2 and S0052: 1.		
HNGFR48	860245	4256	178 - 450	14008	Cys-41 to Ser-47.		S0052: 1, S0428: 1 and L0748: 1.		
HNGFR73	646263	4257	268 - 405	14009			S0052: 2 and H0063: 1.		
HNGFR80	576713	4258	185 - 337	14010	Pro-7 to Lys-20, Glu-45 to Cys-50.		S0052: 3		
HNGFR85	572838	4259	151 - 240	14011	Phe-17 to His-23.		S0052: 2		
HNGFS46	573094	4260	3 - 209	14012			S0052: 2		
HNGFS58	932396	4261	2 - 313	14013			S0052: 2		
HNGFS71	572828	4262	132 - 341	14014			S0052: 2		
HNGFT19	671599	4263	2 - 214	14015	Met-13 to Phe-23, Gln-29 to Trp-40, Arg-63 to Lys-71.		S0052: 1 and S0053: 1.		
HNGFT77	772335	4264	113 - 328	14016	Gly-1 to Glu-9.		S0052: 1 and S0216: 1.		
HNGFU12	971170	4265	45 - 290	14017			AR089: 4, AR061: 1 S0052: 1 and S0428: 1.		
HNGFU28	860576	4266	82 - 189	14018			S0052: 2		
HNGFU40	559450	4267	2 - 367	14019	Arg-16 to Thr-40.		S0052: 2		
HNGFV03	924670	4268	2 - 211	14020			S0052: 1 and S0428: 1.		
HNGFV32	806047	4269	15 - 326	14021			S0052: 1 and S0428: 1.		
HNGFW09	924693	4270	218 - 340	14022			S0052: 2		
HNGFW15	578901	4271	3 - 200	14023	Trp-8 to Ser-14.		S0052: 2		
HNGFW31	578864	4272	149 - 331	14024	Ile-1 to Asn-21, Lys-38 to Thr-43.		S0052: 2		
HNGFW82	839957	4273	7 - 87	14025	Ser-3 to Leu-10.		S0052: 2		
HNGFW96	959715	4274	360 - 473	14026			S0052: 3		
HNGGA08	959637	4275	78 - 206	14027	Ser-34 to Phe-41.		S0052: 2		
HNGGA10	964820	4276	102 - 263	14028			S0052: 2		
HNGGA20	764502	4277	27 - 290	14029	Leu-39 to Ile-46, Pro-48 to Pro-53.		H0250: 2 and S0052: 2.		
HNGGA40	506337	4278	68 - 256	14030	Thr-45 to Cys-53.		S0052: 2		
HNGGA44	577362	4279	136 - 2	14031			S0052: 2 and S0428: 1.		
HNGGA53	576212	4280	154 - 348	14032	Gly-56 to Ala-62.		S0052: 2		
HNGGA90	572869	4281	1 - 210	14033			S0052: 3		
HNGGB09	881399	4282	217 - 294	14034			S0052: 2		



HNGGE10	964821	4283	28 - 171	14035			S0052: 2		
HNGGE38	576217	4284	53 - 136	14036	Gly-8 to Arg-17.		S0052: 2 and S0428: 1.		
HNGGF02	840277	4285	56 - 301	14037			S0052: 2		
HNGGF03	924587	4286	165 - 383	14038			S0052: 2		
HNGGF06	935709	4287	19 - 153	14039	Gly-18 to Thr-24, Pro-38 to Lys-45.		S0052: 2		
HNGGF26	577369	4288	65 - 226	14040	Arg-15 to Leu-20.		S0052: 3		
HNGGF57	576256	4289	131 - 319	14041	Arg-1 to Val-10, Ser-15 to Phe-24, Leu-46 to Lys-52.		S0052: 2		
HNGGG02	920379	4290	2 - 298	14042	Pro-23 to Asn-28, Ser-43 to Gly-51, Gly-75 to Trp-86.		S0052: 2		
HNGGG10	964818	4291	9 - 185	14043	Ser-7 to Asp-19, Trp-32 to Val-38, Lys-45 to Asp-53.		S0052: 4		
HNGGG15	576294	4292	2 - 160	14044	Tyr-18 to Asn-23.		S0052: 2		
HNGGG18	506304	4293	64 - 282	14045	Ala-27 to Gln-32.		S0052: 2		
HNGGG22	576267	4294	124 - 276	14046	Gln-9 to Glu-14.		S0052: 2		
HNGGG25	679153	4295	2 - 106	14047			S0052: 2		
HNGGG26	576298	4296	2 - 283	14048	Asn-28 to Ser-35, Lys-50 to Pro-56.		S0052: 2		
HNGGG50	576295	4297	135 - 296	14049			S0052: 2		
HNGGG56	733510	4298	160 - 309	14050			S0052: 2		
HNGGG63	576296	4299	127 - 378	14051	Gln-10 to Gln-18, Glu-25 to Val-30.		S0052: 2		
HNGGG76	576231	4300	89 - 232	14052			S0052: 2		
HNGGH38	582695	4301	1 - 156	14053	Gly-6 to Ala-14.		S0052: 2		
HNGGH48	576705	4302	106 - 303	14054	Leu-9 to Cys-14, Ile-44 to Asp-50, Ser-56 to Leu-62.		S0052: 2		
HNGGH57	576278	4303	3 - 143	14055	Lys-16 to His-21, Ala-32 to Tyr-37.		S0052: 2		
HNGGH64	860426	4304	169 - 423	14056	Glu-19 to Gly-26, Gly-41 to Thr-47, Ser-79 to Glu-85.		S0052: 2		

HNGGH74	577192	4305	164 - 346	14057			S0052: 2	
HNGGH78	924908	4306	159 - 431	14058	Lys-19 to Arg-26.		S0052: 2	
HNGGH95	576214	4307	36 - 344	14059			S0052: 3	
HNGGI08	959639	4308	3 - 158	14060	Asn-11 to Gly-18, Glu-28 to Gly-35.		S0052: 2	
HNGGI52	576270	4309	1 - 168	14061	Arg-14 to Arg-19.		S0052: 3	
HNGGI58	825371	4310	1 - 117	14062			S0052: 2	
HNGGI81	830081	4311	155 - 286	14063			S0052: 3 and L0600: 2.	
HNGGK31	576259	4312	72 - 1	14064	Lys-1 to Lys-7.		S0052: 2	
HNGGK53	576253	4313	2 - 202	14065	Lys-20 to Trp-27.		S0052: 2	
HNGGK86	576247	4314	102 - 269	14066			S0052: 2	
HNGGK94	576255	4315	69 - 179	14067	Ser-1 to Tyr-7.		S0052: 2	
HNGGL51	576758	4316	48 - 260	14068	Gln-29 to Lys-35, Lys-46 to Arg-52, Ser-58 to Ser-63.		S0052: 2	
HNGGM10	964819	4317	175 - 582	14069	Lys-1 to Asn-8.		S0052: 1 and S0428: 1.	
HNGGM41	576284	4318	137 - 316	14070	Ser-22 to Arg-28.		S0052: 2	
HNGGM56	576219	4319	1 - 150	14071	Asn-9 to Trp-16, Ala-20 to Phe-31, Lys-39 to Gly-45.		S0052: 2	
HNGGM67	576220	4320	189 - 380	14072	Arg-29 to Trp-34.		S0052: 2	
HNGGM76	576287	4321	2 - 298	14073	Ser-19 to Ser-24.		S0052: 2	
HNGGM92	576229	4322	85 - 309	14074			S0052: 2	
HNGGN03	924578	4323	1 - 294	14075	Pro-22 to Thr-28, Pro-63 to Arg-70.		S0052: 2	
HNGGN04	576263	4324	2 - 238	14076			S0052: 2	
HNGGN16	576268	4325	43 - 255	14077	Pro-8 to Gly-18.		S0052: 2	
HNGGN36	708119	4326	2 - 211	14078	His-14 to Trp-27.		S0052: 2	
HNGGN64	577319	4327	1 - 123	14079			S0052: 2	
HNGGN94	967253	4328	14 - 127	14080	Gly-20 to Gln-28.		S0052: 2	
HNGGO01	916754	4329	155 - 340	14081	Lys-30 to Thr-36.		S0052: 2	
HNGGO14	860246	4330	164 - 328	14082	Phe-40 to Gln-48.		S0052: 1 and S0428: 1.	
HNGGO25	576277	4331	2 - 163	14083			S0052: 2	
HNGGQ31	576238	4332	1 - 132	14084	Gly-1 to Gln-8, Ser-16 to Arg-21.		S0052: 2	

HNGGQ41	712426	4333	257 - 475	14085	Trp-1 to Gly-7.	L0748: 4, S0052: 1 and S0428: 1.	
HNGGQ65	576249	4334	1 - 147	14086		S0052: 2	
HNGGQ89	577327	4335	56 - 337	14087	Arg-10 to Pro-18, Pro-38 to Asp-53.	S0052: 2 and S0428: 2.	
HNGGR01	916753	4336	167 - 364	14088	Leu-49 to Asn-54.	L0748: 3, L0766: 1, S0052: 1, L0751: 1 and H0445: 1.	
HNGGR10	964815	4337	121 - 255	14089		S0052: 3	
HNGGR17	576250	4338	44 - 229	14090		S0052: 2	
HNGGR43	576246	4339	214 - 447	14091	Gly-14 to His-23, Trp-40 to Ser-53.	S0052: 2	
HNGGR74	765698	4340	8 - 82	14092		AR089: 1, AR061: 0 S0052: 3	
HNGGS09	970861	4341	1 - 156	14093	Pro-4 to Gly-14.	S0052: 6	
HNGGS26	825369	4342	54 - 353	14094	Tyr-1 to Asp-6, Thr-13 to Val-27.	S0052: 2	
HNGGS33	576305	4343	217 - 423	14095	Glu-8 to Glu-14, Thr-40 to Asn-53.	S0052: 2	
HNGGS41	576308	4344	3 - 77	14096		S0052: 2	
HNGGS66	576312	4345	64 - 192	14097	Pro-11 to Pro-16, Arg-34 to Glu-39.	S0052: 2	
HNGGS67	751781	4346	2 - 112	14098		S0052: 3	
HNGGS73	576740	4347	57 - 200	14099	Ser-16 to Ser-26.	S0052: 3	
HNGGS78	576311	4348	1 - 183	14100	Gly-1 to Asn-25.	S0052: 2	
HNGGT44	576297	4349	143 - 325	14101		S0052: 2	
HNGGT46	719127	4350	46 - 288	14102		S0052: 2	
HNGGT55	576302	4351	75 - 314	14103	Cys-11 to Ser-17.	S0052: 2	
HNGGT57	576301	4352	1 - 249	14104		S0052: 2	
HNGGT58	576299	4353	2 - 376	14105	Tyr-12 to Gln-22.	S0052: 4	
HNGGT62	725750	4354	3 - 110	14106	Pro-10 to Cys-16, Pro-27 to Asn-33.	S0052: 2	
HNGGV07	953549	4355	54 - 194	14107		S0052: 2	
HNGGV55	576313	4356	1 - 300	14108	Pro-7 to Val-16, Ala-42 to Gly-47, Tyr-72 to Pro-82.	S0052: 2	

HNGGV70	781247	4357	178 - 363	14109	Tyr-4 to Ser-11.	S0052: 2, H0521: 1 and H0543: 1.	
HNGGV95	795920	4358	216 - 437	14110	Pro-7 to Arg-14.	S0052: 2	
HNGGX46	868071	4359	3 - 278	14111		S0052: 2	
HNGGX49	860551	4360	128 - 331	14112		S0052: 2	
HNGGX91	576188	4361	71 - 274	14113		S0052: 2	
HNGGX93	576193	4362	1 - 276	14114	Pro-2 to Leu-7, Pro-25 to Cys-30, Gly-42 to Glu-49.	S0052: 2	
HNGGX95	576222	4363	2 - 292	14115		S0052: 2	
HNGHA08	953539	4364	2 - 229	14116	Lys-38 to Arg-43, Thr-70 to Ser-75.	S0052: 2	
HNGHA10	860553	4365	243 - 467	14117	Arg-37 to Thr-48.	S0052: 1 and S0428: 1.	
HNGHA47	576213	4366	2 - 295	14118	Cys-20 to Ser-31, Arg-50 to Ser-58.	S0052: 2	
HNGHA70	576300	4367	161 - 292	14119	Ser-22 to Ala-30, Val-34 to Trp-41.	S0052: 2	
HNGHA77	772279	4368	2 - 217	14120	Ala-15 to Leu-20, His-26 to Leu-33, Cys-35 to Thr-46.	S0052: 2	
HNGHB07	860552	4369	73 - 384	14121	Arg-21 to Asn-26.	S0052: 2	
HNGHB31	576306	4370	17 - 322	14122	Pro-22 to Ser-29, Thr-51 to Gly-61, Gly-76 to His-87.	S0052: 2	
HNGHB33	506261	4371	15 - 92	14123	Gly-13 to Pro-22.	S0052: 2	
HNGHB48	463007	4372	306 - 548	14124		S0052: 3	
HNGHB55	733509	4373	308 - 475	14125	Asn-6 to Thr-19.	S0052: 4	
HNGHB80	576769	4374	1 - 306	14126	Gly-1 to Gly-6.	S0052: 2	
HNGHB91	576215	4375	158 - 529	14127	Asn-69 to Glu-81, Lys-104 to Ser-110.	S0052: 2	
HNGHD04	932099	4376	1 - 339	14128	Ala-102 to Pro-107.	S0052: 2	
HNGHD09	860544	4377	29 - 211	14129	Glu-2 to Pro-14, Ala-29 to Thr-38, Glu-45 to Gly-51.	S0052: 2	
HNGHD22	576314	4378	26 - 223	14130	Pro-14 to Cys-20, Asn-22 to Leu-31.	S0052: 2	

HNGHD25	506262	4379	61 - 318	14131	Phe-1 to Ser-6, Gln-8 to Glu-20, Leu-54 to Ala-60.	S0052: 2		
HNGHD59	836226	4380	82 - 357	14132		S0052: 2		
HNGHD67	576317	4381	321 - 443	14133		S0052: 3		
HNGHE07	953540	4382	71 - 184	14134	Arg-24 to Gly-29.	S0052: 2		
HNGHE17	576209	4383	64 - 180	14135		S0052: 3		
HNGHE52	576197	4384	41 - 280	14136		S0052: 2		
HNGHE56	577124	4385	169 - 357	14137	Pro-7 to Gly-14, Pro-28 to Gln-34.	S0052: 2		
HNGHE62	576202	4386	31 - 279	14138		S0052: 2		
HNGHE69	753107	4387	232 - 516	14139	Gly-21 to Ile-32, Lys-34 to Trp-41.	S0052: 2		
HNGHE95	779951	4388	2 - 157	14140		S0052: 5		
HNGHG15	971736	4389	1 - 177	14141	Gly-1 to Ser-12, Pro-21 to Ser-27.	S0052: 2		
HNGHG22	577414	4390	129 - 263	14142	Lys-7 to Gly-14, Phe-26 to Gly-33.	S0052: 2		
HNGHG56	576230	4391	147 - 260	14143	Pro-11 to Gly-16.	S0052: 2		
HNGHG68	576232	4392	216 - 344	14144	Gly-2 to Pro-11, Ala-27 to Leu-36, Pro-38 to Trp-43.	S0052: 2		
HNGHG71	576218	4393	1 - 183	14145	Gly-1 to Gly-9, Tyr-14 to Ser-20.	S0052: 2		
HNGHJ26	924570	4394	1 - 384	14146	Gly-1 to Lys-6, Leu-10 to Pro-20.	S0052: 2		
HNGHK13	577354	4395	130 - 348	14147	Lys-1 to Glu-35.	S0052: 2 and S0428: 1.		
HNGHK42	582685	4396	26 - 211	14148		S0052: 2		
HNGHK44	576208	4397	39 - 164	14149		S0052: 2		
HNGHK46	576205	4398	39 - 173	14150	Gln-26 to Arg-34, Glu-40 to Arg-45.	S0052: 2		
HNGHK48	576206	4399	182 - 319	14151		S0052: 2		
HNGHK50	576195	4400	230 - 376	14152	Asp-1 to Lys-13.	S0052: 2		
HNGHK53	576191	4401	3 - 143	14153	His-1 to Leu-6, Gln-23 to Thr-42.	S0052: 2		

HNGHK68	576207	4402	2 - 205	14154	Ala-1 to Asn-20.	S0052: 3		
HNGHK77	772277	4403	144 - 494	14155	Lys-11 to Thr-23, Gln-40 to Ile-47.	S0052: 1 and S0428: 1.		
HNGHL10	964814	4404	3 - 242	14156	Gln-45 to Leu-76.	S0052: 2		
HNGHL20	973969	4405	108 - 410	14157	Arg-2 to Gly-20, Pro-23 to Pro-33, Trp-41 to Gly-48, Cys-74 to Ser-79, Asn-84 to Gly-89.	S0052: 2		
HNGHL22	576326	4406	160 - 246	14158	Lys-17 to Arg-24.	S0052: 3, L0752: 2, S0114: 1, L0662: 1 and L0547: 1.		
HNGHL51	576223	4407	232 - 2	14159		S0052: 2		
HNGHL52	576226	4408	38 - 358	14160		S0052: 2		
HNGHL65	576320	4409	2 - 187	14161		S0052: 2		
HNGHL76	506269	4410	1 - 159	14162	Pro-38 to Leu-48.	S0052: 3		
HNGHL77	772283	4411	163 - 306	14163		S0052: 2		
HNGHM33	576741	4412	67 - 315	14164	Ser-1 to Asp-10, Asn-29 to Ser-34, Gln-60 to Lys-77.	S0052: 2		
HNGHM36	576325	4413	2 - 244	14165	Pro-14 to Arg-20.	S0052: 2		
HNGHM51	713805	4414	3 - 281	14166	Thr-47 to Gly-56, Thr-71 to Ser-77, Arg-85 to Arg-90.	S0052: 2		
HNGHN22	421742	4415	2 - 226	14167	Ala-69 to Ser-75.	S0052: 2		
HNGHN40	576165	4416	70 - 255	14168	Arg-1 to Gln-21.	S0052: 2		
HNGHN42	576111	4417	16 - 249	14169	Asp-19 to Leu-30.	S0052: 2		
HNGHN52	576681	4418	61 - 354	14170		S0052: 2		
HNGHN56	733881	4419	198 - 428	14171	Thr-31 to Phe-43.	S0052: 2		
HNGHN70	576108	4420	91 - 297	14172		S0052: 2		
HNGHN75	576110	4421	22 - 237	14173	Met-5 to Gln-19, Gly-21 to Leu-29.	S0052: 2		
HNGHN76	576170	4422	2 - 232	14174		S0052: 2		
HNGHN86	785566	4423	216 - 1	14175		S0052: 2		
HNGHN93	506259	4424	110 - 283	14176	Pro-24 to Ser-29, Asn-32 to Ser-47, His-53 to Pro-58.	S0052: 3		

HNGHN94	970856	4425	1 - 150	14177	Pro-26 to His-33, Pro-35 to Gly-48.	S0052: 2	
HNGHN95	576127	4426	175 - 438	14178	Ser-69 to Gly-75.	S0052: 2	
HNGHO02	920373	4427	40 - 246	14179		S0052: 2	
HNGHO10	964804	4428	118 - 318	14180	Pro-22 to Pro-28.	S0052: 2	
HNGHO15	576168	4429	1 - 192	14181	Gln-41 to Thr-55.	S0052: 3	
HNGHO26	420281	4430	74 - 241	14182		S0052: 2	
HNGHO28	576173	4431	79 - 375	14183	Arg-4 to Lys-11.	S0052: 3	
HNGHO32	575735	4432	148 - 333	14184		S0052: 2	
HNGHO36	576142	4433	26 - 328	14185	Lys-19 to Thr-27, Pro-79 to Ser-86.	S0052: 4	
HNGHO62	840278	4434	46 - 324	14186	Ser-19 to Met-25.	S0052: 2	
HNGHO66	576174	4435	125 - 349	14187	Ser-8 to Trp-14.	S0052: 2	
HNGHP28	576178	4436	93 - 245	14188	Pro-27 to Lys-32, Arg-43 to Ile-50.	S0052: 2	
HNGHP66	576136	4437	20 - 139	14189		S0052: 2	
HNGHP74	577357	4438	3 - 179	14190		S0052: 2	
HNGHP91	576053	4439	112 - 237	14191		S0052: 2	
HNGHP95	577335	4440	262 - 426	14192	Asp-22 to Thr-27.	S0052: 2	
HNGHQ27	683507	4441	156 - 272	14193		S0212: 1 and S0052: 1.	
HNGHQ43	576262	4442	51 - 188	14194	Pro-21 to Leu-28.	S0052: 2	
HNGHQ55	576144	4443	1 - 180	14195	Glu-18 to Arg-28.	S0052: 3	
HNGHQ72	576105	4444	1 - 276	14196	Leu-16 to Gly-23.	S0052: 3	123620, 151410, 600850
HNGHQ76	770126	4445	18 - 140	14197	Asn-14 to Lys-22.	S0052: 3	
HNGHQ96	723008	4446	1 - 273	14198	Lys-59 to Arg-64.	S0052: 2	
HNGHR04	576196	4447	210 - 434	14199	Ser-31 to Pro-36, Arg-44 to Arg-55.	S0052: 3	
HNGHR79	576199	4448	152 - 364	14200		S0052: 2	
HNGHR83	576210	4449	154 - 438	14201	His-1 to Cys-9, Gln-34 to Lys-46, Val-50 to Lys-62, Phe-64 to Lys-70.	S0052: 3	
HNGHT06	935706	4450	3 - 254	14202		S0052: 2	
HNGHT92	576149	4451	95 - 247	14203	Arg-18 to Gly-49.	S0052: 2	

HNGHY07	953531	4452	8 - 211	14204	Ile-9 to His-25.	S0052: 2	
HNGHY31	577363	4453	304 - 438	14205	Ser-32 to Phe-37.	S0052: 3	
HNGHY54	730769	4454	180 - 275	14206	Pro-7 to Asn-12.	H0318: 1 and S0052: 1.	
HNGHY78	576139	4455	18 - 185	14207		S0052: 3	
HNGHZ17	860532	4456	30 - 371	14208	Glu-17 to Ser-24.	S0052: 2 and H0656: 1.	
HNGHZ48	576181	4457	3 - 149	14209		S0052: 2	
HNGHZ51	716649	4458	1 - 147	14210	His-10 to Glu-16, Phe-18 to Asp-23.	S0052: 2	
HNGIA19	576269	4459	117 - 323	14211		S0052: 2	
HNGIA40	576155	4460	56 - 268	14212	Lys-39 to Pro-45.	S0052: 2	
HNGIA66	678887	4461	89 - 265	14213	Trp-5 to Gly-18, Ser-29 to Ser-42.	S0052: 3 and S0428: 1.	
HNGIC34	934280	4462	138 - 242	14214	Asn-23 to Lys-34.	S0052: 1 and S0428: 1.	
HNGIC67	576177	4463	1 - 309	14215	Pro-28 to Ser-36.	S0052: 3	
HNGID03	921946	4464	60 - 182	14216		S0052: 2 and S0053: 1.	
HNGID11	967226	4465	127 - 351	14217		S0052: 2	
HNGID15	660299	4466	1 - 444	14218	Pro-7 to Ser-12, Phe-90 to Glu-96.	S0052: 1 and S0053: 1.	
HNGID16	576114	4467	112 - 264	14219	Val-1 to Trp-11.	S0052: 2	
HNGID33	868069	4468	123 - 1	14220		S0052: 2	
HNGID67	751668	4469	88 - 267	14221		S0052: 1 and S0053: 1.	
HNGID78	576117	4470	34 - 399	14222	Leu-17 to Leu-24, Tyr-26 to Trp-39, Arg-47 to His-58, Ala-69 to Ile-76.	S0052: 2	
HNGID80	576120	4471	66 - 200	14223	Lys-33 to Gly-40.	S0052: 2	
HNGID89	577358	4472	54 - 203	14224	Pro-13 to Gln-22.	S0052: 2	
HNGID91	577189	4473	221 - 361	14225	Arg-40 to Pro-46.	S0052: 1 and S0053: 1.	
HNGIH02	920362	4474	2 - 97	14226		S0052: 2	
HNGIH56	576122	4475	2 - 226	14227	Ala-1 to Ser-7.	S0052: 2	
HNGIH94	576123	4476	3 - 152	14228	Thr-18 to Leu-23, Asp-42 to Cys-48.	S0052: 2	
HNGII16	576154	4477	1 - 78	14229		S0052: 2	
HNGII47	576156	4478	1 - 117	14230	Arg-21 to Pro-28, Lys-31 to Trp-37.	S0052: 2	



HNGII50	915340	4479	3 - 158	14231	Asn-6 to Thr-16.	S0052: 2	
HNGII74	576158	4480	149 - 367	14232	Trp-22 to Gly-28, Arg-46 to Ser-52.	S0052: 2	
HNGII76	576153	4481	3 - 113	14233	Ser-30 to Gln-37.	S0052: 2	
HNGII85	576102	4482	2 - 142	14234	Ala-1 to Ala-13, Val-17 to Ile-27.	S0052: 2 and S0053: 1.	
HNGII01	916748	4483	67 - 168	14235	Ser-19 to Lys-26.	S0052: 1 and S0428: 1.	
HNGII05	925597	4484	59 - 262	14236		S0052: 2	
HNGII11	964809	4485	73 - 258	14237	Gln-16 to Asn-22.	S0052: 3	
HNGII59	860526	4486	2 - 223	14238	Pro-5 to Ser-11, Lys-17 to Tyr-23.	S0052: 3	
HNGII66	576224	4487	1 - 141	14239	Cys-13 to Ile-18.	S0052: 2	
HNGII67	506355	4488	163 - 306	14240		S0052: 3	
HNGII96	779901	4489	122 - 448	14241	Pro-10 to Pro-31.	S0052: 3	
HNGIK41	712362	4490	132 - 218	14242		S0052: 3	
HNGIK42	713817	4491	3 - 230	14243	His-1 to Arg-8, Gly-24 to Gly-38, Glu-41 to Trp-47.	S0052: 2	
HNGIK77	772230	4492	3 - 149	14244	Ser-13 to Val-27.	S0052: 2	
HNGIL27	839952	4493	291 - 434	14245	Lys-1 to Tyr-7, Arg-43 to Gln-48.	S0052: 1 and H0422: 1.	
HNGIL43	715328	4494	168 - 332	14246	Leu-6 to Pro-11, Leu-16 to Trp-23, Lys-35 to Leu-42.	S0052: 2	
HNGIM04	615308	4495	30 - 215	14247	Pro-41 to His-53.	H0083: 1 and S0052: 1.	
HNGIM46	653221	4496	135 - 254	14248	Arg-1 to Leu-21.	S0052: 2	
HNGIM76	770078	4497	2 - 268	14249		S0052: 2	
HNGIM90	788715	4498	57 - 233	14250	Gln-19 to Ala-34, Ser-41 to Lys-48, Ser-53 to Lys-59.	S0052: 3	
HNGIM92	783495	4499	55 - 216	14251	Tyr-1 to Lys-8, Phe-11 to Asp-16.	S0052: 1 and H0423: 1.	
HNGIN11	964991	4500	219 - 521	14252		S0052: 1 and S0428: 1.	
HNGIN18	666515	4501	3 - 254	14253	His-47 to Pro-52, Arg-58 to Gly-67.	S0052: 2	

HNGIN28	860521	4502	123 - 290	14254	Gln-20 to Arg-25.	S0052: 1 and S0216: 1.	
HNGIO15	660320	4503	159 - 404	14255	Glu-1 to Thr-8, Arg-15 to Asp-26.	S0052: 3	
HNGIO77	576857	4504	253 - 378	14256		S0052: 2 and H0341: 1.	
HNGIP30	577338	4505	3 - 242	14257	Glu-2 to Glu-18, Gly-50 to Ala-55.	S0052: 2, L0663: 1, S0053: 1 and H0445: 1.	
HNGIP39	840215	4506	2 - 352	14258	Glu-52 to Ser-60.	S0052: 1 and S0428: 1.	
HNGIP42	860518	4507	175 - 366	14259	Ile-42 to Gly-47.	S0052: 1 and S0428: 1.	
HNGIP72	575752	4508	46 - 156	14260		S0052: 3	
HNGIQ28	860510	4509	144 - 299	14261		S0052: 2	
HNGIQ43	715324	4510	166 - 417	14262	Gly-15 to Arg-20.	S0052: 2	
HNGIQ48	720944	4511	3 - 185	14263	His-1 to Glu-6, Gly-19 to Ser-24, Ile-28 to Pro-40.	S0052: 2	
HNGIQ66	506352	4512	1 - 105	14264	Gly-1 to Lys-14.	S0052: 2	
HNGIR34	719088	4513	236 - 349	14265		S0052: 2	
HNGIR92	524799	4514	82 - 243	14266	Arg-24 to Tyr-34.	S0052: 2	
HNGIS13	575753	4515	93 - 308	14267	His-11 to Ser-22, Leu-35 to Thr-41, Gln-45 to Gln-50.	S0052: 2	
HNGIS30	575758	4516	59 - 202	14268		S0052: 2	
HNGIT70	953890	4517	1 - 237	14269		S0052: 2	
HNGIU55	576804	4518	1 - 171	14270	Asn-39 to His-45.	S0052: 1 and S0053: 1.	
HNGIU78	666261	4519	799 - 578	14271	Leu-9 to Thr-14, Asn-69 to Glu-74.	L0803: 6, L0756: 5, L0731: 5, L0794: 3, L0755: 3, L0774: 2, L0805: 2, S0052: 2, L0746: 2, L0777: 2, L0598: 1, L0646: 1, L0766: 1, L0606: 1, L0661: 1, L0367: 1, L0666: 1, H0522: 1, L0742: 1, L0748: 1, L0740: 1, L0754: 1, L0745: 1, L0749: 1, L0779: 1, L0758: 1 and L0608: 1.	
HNGIV01	913687	4520	116 - 310	14272		H0580: 1 and S0052: 1.	
HNGIV24	766775	4521	1 - 210	14273		S0052: 1 and S0216: 1.	

HNGIV81	777970	4522	190 - 357	14274	Glu-19 to Thr-24, Thr-51 to Lys-56.	S0052: 1 and S0428: 1.	
HNGIW70	883086	4523	131 - 577	14275	Lys-5 to Asn-10.	S0052: 2 and S0428: 1.	
HNGIW73	764456	4524	63 - 290	14276	Gly-7 to Gln-12.	S0052: 1 and S0216: 1.	
HNGIY22	674660	4525	37 - 171	14277		S0052: 2	
HNGIY36	707323	4526	162 - 1	14278		S0052: 2	
HNGIY56	868065	4527	3 - 149	14279		S0052: 2	
HNGIY60	740404	4528	1 - 162	14280	Gly-1 to Lys-11, Gly-13 to Gly-25.	S0052: 2	8p23.1
HNGIY79	775229	4529	3 - 530	14281	Lys-31 to Gly-37, Pro-56 to Phe-65, Leu-77 to Asp-83, Pro-91 to Lys-97.	AR061: 10, AR089: 5 T0042: 1, S0052: 1, H0521: 1 and L0439: 1.	
HNGIY92	792737	4530	35 - 334	14282	Thr-65 to Trp-80.	S0052: 1 and S0428: 1.	
HNGIZ36	670962	4531	261 - 356	14283	Ser-27 to Tyr-32.	S0052: 2 and H0402: 1.	
HNGIZ56	733439	4532	186 - 305	14284		S0052: 2	
HNGIZ69	757599	4533	218 - 436	14285	Arg-15 to Asp-24.	S0052: 2	
HNGIZ82	668704	4534	147 - 371	14286	Met-67 to Lys-72.	S0052: 3, L0809: 1 and L0789: 1.	
HNGJA15	787570	4535	763 - 927	14287		S0052: 1 and S0216: 1.	
HNGJA18	666512	4536	157 - 306	14288		S0052: 2	
HNGJB34	936011	4537	257 - 436	14289	Arg-13 to Gly-18.	L0476: 1, S0052: 1 and S0053: 1.	
HNGJB52	724406	4538	203 - 445	14290	Pro-2 to Arg-7.	S0052: 1 and S0053: 1.	
HNGJB68	753060	4539	58 - 285	14291		S0052: 2	
HNGJC60	723380	4540	183 - 416	14292	Val-2 to Gly-9, Gly-11 to Gly-24.	S0052: 2	
HNGJC66	786924	4541	2 - 211	14293	Pro-9 to Leu-16, Ala-54 to Gly-62.	S0052: 2	
HNGJC76	739500	4542	1 - 132	14294		S0052: 2	
HNGJD15	660312	4543	1 - 93	14295		S0052: 2	
HNGJD61	774154	4544	375 - 569	14296	His-22 to Leu-27, Pro-43 to Gly-64.	S0052: 1 and S0428: 1.	
HNGJD71	760397	4545	24 - 371	14297	Ser-4 to Gly-10, Gly-36 to Asp-42.	S0052: 1 and S0428: 1.	108725, 120700, 133171, 136836,

						Leu-81 to Thr-91, Pro-93 to Gly-99, Ser-108 to Ala-114.				145981, 147141, 164953, 188070, 600957, 601238, 601846, 602216, 602477
HNGJD76	670948	4546	20 - 259	14298					S0052: 2 and S0053: 1.	
HNGJE16	661976	4547	3 - 212	14299					H0341: 1 and S0052: 1.	
HNGJE33	795219	4548	134 - 286	14300					S0052: 1 and S0428: 1.	
HNGJE40	960003	4549	74 - 304	14301		Asn-1 to Gly-7, Pro-21 to Leu-26.			H0265: 1 and S0052: 1.	
HNGJE56	669732	4550	222 - 374	14302					S0052: 2	
HNGJF26	666504	4551	2 - 241	14303		Leu-38 to Ala-43.			S0052: 2	
HNGJF65	698487	4552	401 - 589	14304					S0052: 2, H0306: 1 and L0790: 1.	
HNGJF73	683440	4553	217 - 408	14305					S0052: 2	
HNGJF79	775221	4554	1 - 156	14306					H0271: 1 and S0052: 1.	
HNGJG15	660308	4555	121 - 354	14307		Pro-44 to Leu-55, Arg-60 to Ser-66, Arg-69 to Trp-78.			S0052: 2	
HNGJG37	708703	4556	6 - 146	14308		Ser-1 to His-6.			S0052: 2	
HNGJG72	970797	4557	53 - 163	14309		Thr-16 to Tyr-24, Glu-29 to Gln-34.			S0052: 1 and H0445: 1.	
HNGJG89	778294	4558	85 - 252	14310					S0052: 2	
HNGJH09	415566	4559	39 - 179	14311					S0052: 1 and S0216: 1.	
	860378	9587	118 - 315	19339		Glu-52 to Lys-57.				
HNGJH11	860350	4560	1 - 222	14312		Gly-1 to Val-13, Ser-34 to Leu-39.			S0052: 3	
HNGJH35	952237	4561	3 - 167	14313		Ser-14 to Glu-20.			S0052: 1 and S0428: 1.	
HNGJH50	666843	4562	134 - 307	14314					S0052: 3	
HNGJH96	953648	4563	1 - 177	14315					S0052: 2	
HNGJI29	690667	4564	197 - 385	14316		Trp-1 to Asn-9.			S0052: 2	
HNGJI35	707328	4565	2 - 223	14317		Glu-16 to Arg-29, Ser-41 to Gly-48.			S0052: 4	
HNGJI42	465160	4566	158 - 418	14318					S0052: 2	
HNGJI54	465159	4567	1 - 381	14319		Glu-43 to Ala-49,			S0052: 3	

							Cys-57 to Ser-62, Arg-79 to Thr-86.			
HNGJ171	760393	4568	48 - 308	14320			Pro-25 to Arg-32, Arg-38 to Gly-49.		S0052: 2	
HNGJ177	772215	4569	94 - 357	14321			Ala-12 to Asn-17, Thr-23 to Gln-33.		S0052: 2	
HNGJ183	781213	4570	221 - 376	14322			Arg-7 to Pro-21, Pro-40 to Gln-47.		S0052: 3	
HNGJ122	597096	4571	1 - 285	14323			Thr-2 to Cys-13, Asp-24 to Gln-32.		S0052: 1, S0428: 1 and L0599: 1.	
HNGJ151	725702	4572	124 - 53	14324					S0052: 2	
HNGJK04	615288	4573	76 - 222	14325			Ala-2 to Thr-18, Arg-23 to Gln-29.		S0052: 2	
HNGJK06	935548	4574	2 - 163	14326					S0052: 2	
HNGJK12	970686	4575	132 - 227	14327			Glu-1 to Ser-9.		S0002: 1 and S0052: 1.	
HNGJK23	707327	4576	3 - 83	14328					S0052: 2	
HNGJK29	663954	4577	1 - 174	14329			Cys-36 to Ser-41, Thr-48 to Arg-58.		S0052: 2	
HNGJK42	713810	4578	14 - 223	14330			Lys-3 to Val-9, Cys-24 to Phe-30, Pro-46 to Gln-57.		S0052: 2	
HNGJK50	860196	4579	69 - 398	14331			His-21 to Arg-26, Met-38 to Ala-47.		S0052: 1 and S0428: 1.	
HNGJK54	730713	4580	238 - 101	14332			Gln-1 to Ile-9.		S0052: 3	
HNGJK58	736080	4581	122 - 355	14333			His-16 to Lys-48.		S0052: 2	
HNGJK71	739323	4582	87 - 290	14334					S0052: 2	
HNGJK77	732737	4583	191 - 319	14335			His-1 to Trp-12, Ser-29 to Ile-34.		S0052: 3 and H0444: 1.	
HNGJK89	772218	4584	2 - 265	14336			Arg-2 to Gly-12.		S0052: 3	
HNGJL16	661977	4585	177 - 359	14337			Ser-1 to Ser-8, Asn-44 to Ala-54.		S0052: 2	
HNGJL26	681819	4586	1 - 369	14338			Gly-1 to Ser-7, Pro-12 to Glu-20.		S0052: 2	
HNGJL27	725295	4587	1 - 264	14339					L0639: 1, L0659: 1, L0517: 1, S0052: 1 and S0216: 1.	
HNGJL60	462981	4588	164 - 439	14340			Ser-47 to Asp-52.		S0052: 2	

HNGJL73	783518	4589	69 - 311	14341	Asn-1 to Leu-8.	S0052: 2		
HNGJL76	793537	4590	69 - 608	14342	Asp-36 to Arg-44.	S0052: 1, S0053: 1 and L0361: 1.	19q13.3-q13.4	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 191044, 258501, 600040, 600138, 602225, 602225
HNGJM20	964800	4591	2 - 157	14343		S0052: 2		
HNGJM35	707324	4592	3 - 116	14344	Arg-18 to Leu-25.	S0052: 2 and L0361: 1.		
HNGJM82	967328	4593	432 - 19	14345		S0134: 1, L0769: 1, L0794: 1, S0052: 1, S0428: 1, L0753: 1, L0592: 1 and L0599: 1.		
HNGJO10	964678	4594	140 - 301	14346	Gly-1 to Glu-6.	S0052: 2		
HNGJO35	707329	4595	2 - 403	14347	Arg-39 to Gly-49, Pro-51 to Thr-56.	S0052: 2		
HNGJO45	717069	4596	322 - 408	14348		S0052: 1 and S0053: 1.		
HNGJO73	668997	4597	208 - 360	14349	Ser-28 to Ser-33, Gly-39 to Thr-46.	H0318: 1 and S0052: 1.		
HNGJP03	860363	4598	95 - 376	14350	Cys-13 to Arg-22, Pro-29 to Lys-41.	S0052: 2		
HNGJP10	964668	4599	72 - 392	14351	Gly-12 to Lys-22, Asn-29 to Ser-34.	S0052: 1 and S0428: 1.		
HNGJP80	766278	4600	118 - 429	14352	Pro-10 to Gln-15.	H0305: 1, S0052: 1 and S0428: 1.		
HNGJQ14	881542	4601	2 - 370	14353		S0052: 1 and S0053: 1.		
HNGJQ23	789764	4602	192 - 314	14354	Gly-12 to Pro-18.	S0052: 1 and S0216: 1.		
HNGJQ25	924652	4603	3 - 170	14355		S0052: 2		
HNGJQ35	707326	4604	146 - 388	14356		S0052: 2		
HNGJR01	916555	4605	203 - 373	14357		H0090: 1 and S0052: 1.		
HNGJS24	677235	4606	178 - 333	14358		S0052: 2		
HNGJS45	720746	4607	63 - 1	14359		S0052: 2		
HNGJS53	728258	4608	256 - 444	14360		S0052: 2		
HNGJS64	746606	4609	16 - 357	14361	Ser-2 to Arg-8, Gly-14 to Trp-24, Thr-28 to Gln-33,	S0052: 2		

HNGJS91	920755	4610	3 - 221	14362	Gly-40 to Phe-58, Gly-80 to Arg-94.			
HNGJT36	888329	4611	122 - 352	14363	His-1 to Asp-6,	S0052: 2		
HNGJT72	775502	4612	1 - 288	14364	Ile-67 to Trp-72.			
HNGJT93	792338	4613	158 - 343	14365	Asn-5 to Ser-12.	S0052: 2		
HNGJT95	953418	4614	120 - 254	14366	Thr-28 to Leu-33,	S0052: 1 and S0428: 1.		
HNGJU36	708122	4615	651 - 457	14367	Trp-61 to Pro-67.			
HNGJU50	724416	4616	272 - 412	14368		S0052: 2		
HNGJU51	725703	4617	2 - 109	14369		S0052: 2		
HNGJU78	860347	4618	166 - 375	14370	Glu-21 to Asn-27.	S0052: 2		
HNGJV04	615283	4619	18 - 224	14371	Gln-28 to Gly-42.	S0052: 2		
HNGJV10	964672	4620	205 - 378	14372	Ser-5 to Val-10,	S0052: 2		
					Ala-27 to Gly-33.			
HNGJV91	790213	4621	144 - 1	14373		S0052: 1 and S0216: 1.		
HNGKA62	876593	4622	97 - 345	14374	Arg-1 to Ser-6.	H0556: 1, S0428: 1, L0589: 1 and H0423: 1.		
HNGKB11	966119	4623	3 - 311	14375	Gly-2 to Pro-17, Pro-31 to Gly-48.	S0428: 2		
HNGKB25	944424	4624	89 - 445	14376	Trp-1 to Gln-8, Thr-16 to Trp-22, Ser-67 to Ser-75.	AR061: 4, AR089: 4 S0114: 1, H0376: 1, S0428: 1 and L0748: 1.		
HNGKB78	971110	4625	98 - 322	14377	Lys-13 to Thr-18, Ser-24 to Ser-29.	S0428: 1, S0053: 1 and S0216: 1.		
HNGKB93	791760	4626	63 - 305	14378	Arg-6 to Gly-21, Thr-34 to Pro-39, Pro-43 to Pro-50.	H0087: 1 and S0428: 1.		
HNGKD55	860343	4627	359 - 547	14379	Met-40 to Ser-45.	S0428: 2		
HNGKD94	793414	4628	164 - 364	14380		H0271: 1, S0052: 1 and S0428: 1.		
HNGKE05	860320	4629	297 - 497	14381	Arg-6 to Gly-12, Arg-36 to Arg-47.	S0428: 2		
HNGKE07	952221	4630	2 - 361	14382	Lys-56 to Ser-62.	S0428: 2, S0053: 1 and S0216: 1.	19q13.3-q13.4	113900, 126340, 126391, 130410,

										134790, 138570, 160900, 173850, 191044, 258501, 600040, 600138, 602225, 602225
HNGKE52	812714	4631	304 - 579	14383			Pro-32 to Gln-38, Pro-56 to Leu-66.	S0428: 2		
HNGKE73	860312	4632	251 - 631	14384				S0428: 2 and S0052: 1.		
HNGKE89	786257	4633	268 - 420	14385				S0428: 2		
HNGKE91	789685	4634	137 - 274	14386			Glu-29 to Phe-35.	S0428: 2 and S0052: 1.		
HNGKE93	791623	4635	3 - 311	14387			Gly-1 to Pro-7.	H0255: 1 and S0428: 1.		
HNGKF01	915247	4636	59 - 352	14388			Pro-33 to Pro-49, Pro-56 to Pro-63.	S0428: 2		
HNGKF11	965047	4637	6 - 185	14389				S0428: 2 and S0052: 1.		
HNGKF83	780453	4638	1 - 243	14390			His-5 to Gly-15, Phe-22 to Arg-28, Ser-45 to Gly-54, Ser-64 to Lys-71.	S0428: 2		
HNGKG43	958487	4639	287 - 640	14391			Lys-41 to Asn-46, Lys-55 to Thr-61, Ser-77 to Thr-84.	S0428: 1 and S0216: 1.		
HNGKG61	860317	4640	57 - 233	14392			Thr-6 to Gly-17.	S0428: 2 and S0052: 1.		
HNGKH04	926987	4641	318 - 1	14393				S0052: 1 and S0428: 1.		
HNGKI30	860205	4642	20 - 328	14394			Phe-33 to Gly-41, Glu-58 to Lys-63, Arg-78 to Ser-83, Pro-92 to Leu-101.	S0428: 2	5q32-q33	109690, 109690, 131400, 138491, 138491, 138491, 154500, 180071, 181460, 222600, 222600, 222600, 234000, 272750, 600807, 601411, 601596, 602089
HNGKI36	784854	4643	3 - 206	14395			Ala-24 to Ser-30, Gln-61 to Gln-68.	S0428: 2		
HNGKI90	787378	4644	2 - 169	14396				S0428: 2		
HNGKI93	791671	4645	42 - 515	14397			Leu-26 to Arg-32.	H0255: 1 and S0428: 1.		



HNGKJ01	915231	4646	55 - 444	14398	Ile-1 to Thr-26, Arg-36 to Ala-42, Glu-61 to Lys-66, Arg-76 to Arg-81, Val-104 to Ile-117, Gln-119 to Gly-127.	S0428: 1 and S0053: 1.		
HNGKJ38	806053	4647	57 - 356	14399	Glu-24 to Pro-31.	S0428: 2, H0264: 1, S0052: 1 and S0053: 1.		
	974222	9588	426 - 184	19340	Ser-26 to His-31, Ala-65 to Glu-71.			
HNGKJ51	883072	4648	1 - 315	14400	Asp-1 to Arg-7.	S0428: 2		
HNGKK35	806051	4649	49 - 285	14401	Pro-72 to Arg-79.	S0428: 2		
HNGKO11	966093	4650	123 - 1	14402		S0428: 2		
HNGKP29	860305	4651	3 - 203	14403	Gln-5 to Pro-10.	S0052: 1 and S0428: 1.		
HNGKS06	974356	4652	148 - 372	14404		H0069: 1 and S0428: 1.		
HNGKT08	958311	4653	175 - 369	14405		S0052: 1 and S0428: 1.		
HNGKT69	860302	4654	159 - 374	14406		S0052: 1 and S0428: 1.		
HNGKU04	926948	4655	149 - 289	14407	Gln-1 to Lys-13.	S0052: 1 and S0428: 1.		
HNGKV01	915218	4656	65 - 280	14408	Phe-14 to Gln-22, Gly-37 to Cys-43, Met-47 to Lys-53, Glu-56 to Ser-62.	S0052: 1 and S0428: 1.		
HNGLA54	860206	4657	1 - 153	14409	Pro-23 to Cys-34.	S0428: 2		
HNGLC01	915288	4658	346 - 579	14410		S0052: 1 and S0428: 1.		
HNGLC46	775300	4659	63 - 257	14411	Pro-2 to Gly-20.	S0052: 1 and S0428: 1.		
HNGLD34	830026	4660	97 - 210	14412	Pro-14 to Gly-23.	S0428: 2 and L0750: 1.		
HNGLE25	860260	4661	2 - 313	14413	Thr-1 to Trp-6, Pro-80 to Ser-88.	S0428: 2		
HNGLE52	835972	4662	181 - 396	14414		S0052: 1 and S0428: 1.		
HNGLE74	860263	4663	163 - 468	14415	Pro-1 to Asn-6.	S0052: 1 and S0428: 1.		
HNGLF03	922969	4664	320 - 472	14416	Glu-1 to Ser-13, Glu-24 to Gly-30.	H0271: 1, S0052: 1 and S0428: 1.		
HNGLF08	958312	4665	199 - 465	14417	Ser-11 to Trp-21, Arg-74 to Glu-80.	S0428: 2, S0052: 1 and L0731: 1.		
HNGLG06	839088	4666	234 - 689	14418	Asp-73 to Gly-79, Val-107 to Ile-114,	AR061: 7, AR089: 2 H0318: 1, S0144: 1 and		

HNGLH72	785570	4667	280 - 453	14419	Met-120 to Tyr-126.	S0428: 1.	
HNGLH82	954140	4668	105 - 404	14420	Ser-9 to Ser-25.	S0052: 1 and S0428: 1.	
HNGLJ04	954943	4669	332 - 496	14421		S0052: 3 and S0428: 1.	
HNGLJ20	806045	4670	78 - 323	14422		S0052: 1 and S0428: 1.	
HNGLK13	785685	4671	23 - 238	14423		S0428: 2	
HNGLK65	795280	4672	301 - 522	14424		S0052: 1 and S0428: 1.	
HNGLK90	795225	4673	234 - 491	14425	Tyr-1 to Cys-9.	S0428: 2	
HNGLL03	923028	4674	220 - 420	14426		S0052: 1 and S0428: 1.	
HNGLL11	966105	4675	35 - 190	14427		S0052: 1 and S0428: 1.	
HNGLL24	859922	4676	330 - 584	14428	Lys-1 to Gly-10, Met-12 to Gln-18, Arg-48 to Pro-61.	S0428: 1 and S0216: 1.	
HNGLL31	789193	4677	139 - 288	14429	Glu-29 to Trp-34.	H0179: 1 and S0428: 1.	
HNGLL41	845274	4678	734 - 288	14430	Gly-1 to Gly-8.	AR051: 29, AR050: 25, AR054: 17 S0428: 2	
HNGLL67	873128	9589	157 - 456	19341	Pro-21 to Tyr-32.		
HNGLL91	860253	4679	46 - 336	14431		S0052: 1 and S0428: 1.	
HNGLM06	789743	4680	140 - 421	14432	Ser-12 to Glu-25.	S0428: 3	
HNGLO10	919222	4681	36 - 122	14433	Asp-1 to Tyr-8.	S0428: 2	
HNGLO70	963504	4682	13 - 285	14434		S0052: 1 and S0428: 1.	
HNGLO80	779223	4683	49 - 213	14435	Gly-19 to Leu-30.	S0428: 2	
HNGLO86	775504	4684	505 - 741	14436	Arg-6 to Ile-11.	S0052: 1 and S0428: 1.	
HNGLO92	780484	4685	138 - 527	14437	Met-11 to Arg-16.	S0428: 2 and L0748: 1.	
	924891	4686	73 - 666	14438	Ser-2 to Trp-8, Arg-15 to Ser-25, Pro-41 to Glu-46, Gln-51 to Asn-57, Gly-106 to Ala-113, Pro-124 to Pro-134.	S0052: 1 and S0428: 1.	
HNGLR39	835586	4687	434 - 679	14439	Phe-38 to Glu-48.	S0428: 3	
HNGLR91	789707	4688	3 - 347	14440	Thr-29 to Ser-41, Lys-54 to Cys-67.	S0052: 1 and S0428: 1.	
HNGLS86	784860	4689	259 - 405	14441		S0052: 1 and S0428: 1.	

HNGLT67	958777	4690	377 - 547	14442			H0589: 1 and S0428: 1.		
HNGXL63	934371	4691	3 - 203	14443			S0428: 2		
HNGMA01	915306	4692	251 - 424	14444		Pro-31 to Gly-36, Lys-43 to Lys-49.	S0428: 2		
HNGMA49	860244	4693	336 - 94	14445			S0428: 2 and S0052: 1.		
HNGMB26	860166	4694	33 - 317	14446		Pro-24 to Gln-29.	S0428: 2		
HNGMB33	773752	4695	263 - 541	14447		Ala-5 to Arg-13, Arg-31 to Gly-48, Gly-52 to Thr-58.	S0052: 1 and S0428: 1.		
HNGMC51	860243	4696	11 - 454	14448		Asn-1 to Tyr-6.	H0402: 1, S0428: 1 and L0439: 1.		
HNGMD03	923041	4697	121 - 372	14449			S0428: 2		
HNGMD04	927026	4698	36 - 338	14450		Pro-41 to Leu-47, Thr-50 to Ala-59.	S0428: 2		
HNGME93	793483	4699	16 - 252	14451		Ala-12 to Gln-17, Pro-59 to Arg-67.	S0428: 2		
HNGMF04	860242	4700	353 - 592	14452		Gln-26 to Lys-36.	S0052: 1 and S0428: 1.		
HNGMF11	966114	4701	1 - 159	14453			S0428: 2		
HNGMF46	795236	4702	226 - 2	14454			S0428: 2 and H0023: 1.		
HNGMF79	772974	4703	66 - 287	14455		Lys-4 to Gly-21, Glu-57 to Thr-62.	S0428: 2		
HNGMF94	966091	4704	147 - 389	14456		Pro-34 to Asp-46, Arg-52 to Lys-57.	S0428: 2		
HNGMG06	934318	4705	111 - 254	14457			S0428: 2		
HNGMG08	958361	4706	18 - 218	14458			S0428: 2		
HNGMH80	775503	4707	335 - 487	14459		Pro-31 to Leu-45.	S0114: 1 and S0428: 1.		
HNGMH93	791725	4708	232 - 429	14460		Arg-1 to Met-6, Phe-35 to Leu-40, Pro-55 to Arg-66.	S0052: 1 and S0428: 1.		
HNGMJ04	923011	4709	284 - 156	14461			S0428: 2		
HNGMJ89	786340	4710	107 - 463	14462		Ala-63 to Trp-69.	AR089: 15, AR061: 7 S0428: 2		
HNGML07	952224	4711	214 - 453	14463		Ala-1 to Gln-19, Gln-25 to Trp-36, Met-53 to Gly-66.	S0428: 2		
HNGML53	860240	4712	86 - 433	14464		Ser-35 to Pro-41.	S0428: 2		

HNGMM51	860201	4713	121 - 501	14465	Arg-8 to Ser-13, Ala-31 to Cys-37, Thr-76 to Glu-83, Leu-93 to Arg-99.	S0428: 2		
HNGMM54	933358	4714	2 - 220	14466	Gly-11 to Asp-33.	H0250: 2 and S0428: 1.		
HNGMM87	806036	4715	138 - 437	14467	Asn-10 to Arg-22, Asn-91 to Ser-96.	H0271: 1 and S0428: 1.		
HNGMV73	806000	4716	250 - 519	14468	Glu-1 to Leu-11.	S0428: 2		
HNGMW52	860231	4717	176 - 595	14469	Thr-1 to Ser-7.	S0428: 2		
HNGMW92	790852	4718	226 - 618	14470	Asn-8 to Arg-17, Asn-35 to Tyr-40.	S0052: 1 and S0428: 1.		
HNGMX80	786255	4719	2 - 268	14471	Lys-13 to Trp-23, Arg-36 to Lys-41.	S0428: 2, H0610: 1, H0271: 1 and S0052: 1.		
HNGMX87	835612	4720	3 - 380	14472	Pro-31 to Asp-58, Ser-77 to Gln-87, Pro-89 to Leu-95.	S0428: 2		
HNGMX91	789680	4721	79 - 309	14473	Ser-1 to Leu-6.	S0052: 1 and S0428: 1.		
HNGNA23	779201	4722	1 - 135	14474	Glu-1 to Ser-20.	S0428: 2		
HNGNB01	915258	4723	9 - 83	14475	Phe-1 to Thr-10.	S0428: 2		
HNGNE65	963425	4724	136 - 561	14476	Val-1 to Gly-6.	S0428: 2		
HNGNF40	861967	4725	1 - 237	14477		H0300: 2 and S0428: 1.		
HNGNG37	847818	4726	333 - 506	14478	Leu-49 to Arg-54.	S0428: 2, L0517: 1 and S0052: 1.		
HNGNH03	922831	4727	117 - 389	14479	Asn-1 to Pro-21, Ser-33 to Trp-42, Thr-52 to Lys-57, Pro-69 to Trp-89.	H0556: 1 and S0428: 1.		
HNGNI04	926985	4728	214 - 492	14480	Ser-27 to Gln-38.	S0428: 2		
HNGNI52	781913	4729	146 - 313	14481	Ala-1 to Gly-6, Thr-12 to Thr-19.	S0052: 1, S0428: 1 and S0053: 1.		
HNGNI75	860168	4730	35 - 319	14482	Arg-45 to Glu-50, Thr-62 to Asn-72.	S0428: 2		
HNGNI94	893899	4731	2 - 370	14483	Pro-9 to Ser-14, Ser-46 to Ala-53, Ala-69 to Ala-86, Arg-96 to Pro-108.	S0052: 2 and S0428: 1.		

HNGNM24	841902	4732	67 - 243	14484	Glu-37 to Arg-42.	H0057: 1 and S0428: 1.		
HNGNO03	860155	4733	269 - 475	14485	Ala-39 to Arg-46.	S0428: 2		
HNGNR04	926870	4734	229 - 387	14486		S0052: 1 and S0428: 1.		
HNGNS10	963470	4735	575 - 733	14487		S0428: 2		
HNGNS58	788971	4736	40 - 210	14488		S0052: 1 and S0428: 1.		
HNGNS90	787388	4737	283 - 465	14489		S0052: 1 and S0428: 1.		
HNGNV80	908167	4738	39 - 389	14490	Pro-40 to Arg-54, Pro-57 to Gly-72, Glu-74 to Ala-81, Pro-89 to His-96, Leu-99 to Glu-104.	S0428: 2		
HNGNW04	860199	4739	116 - 253	14491	Arg-22 to Glu-36.	H0486: 1 and S0428: 1.		
HNGNW85	783747	4740	3 - 248	14492		H0402: 1 and S0428: 1.		
HNGNX37	806018	4741	321 - 539	14493		S0428: 2		
HNGNX65	806042	4742	140 - 346	14494	Glu-48 to Cys-54.	S0428: 2		
HNGNZ01	860158	4743	261 - 398	14495		S0428: 2 and S0052: 1.		
HNGNZ38	790926	4744	110 - 280	14496		S0216: 2 and S0428: 1.		
HNGNZ91	839887	4745	88 - 399	14497		S0428: 3 and L0377: 1.		
HNGOA11	966082	4746	12 - 224	14498	Leu-39 to Gly-44.	S0052: 1 and S0428: 1.		
HNGOA82	779154	4747	285 - 449	14499		S0052: 1 and S0428: 1.		
HNGOB95	791700	4748	1 - 144	14500	Glu-18 to Glu-25, Ser-36 to Val-42.	S0428: 2		
HNGOD68	790805	4749	43 - 282	14501	Asp-73 to Phe-80.	S0428: 2		
HNGOE64	860143	4750	192 - 563	14502		S0428: 3		
HNGOF50	796548	4751	140 - 367	14503	Ser-10 to Leu-19.	S0428: 1 and S0053: 1.		
HNGOF84	782188	4752	1 - 333	14504	Gly-1 to Gly-9, Thr-57 to Thr-71, Thr-77 to Ser-82.	S0428: 1 and S0216: 1.		
HNGOF85	783717	4753	417 - 725	14505		H0402: 1, S0428: 1 and S0053: 1.		
HNGOG49	971178	4754	1 - 255	14506		S0052: 1 and S0428: 1.		
HNGOH42	958943	4755	337 - 519	14507	Pro-7 to Arg-12.	H0580: 1 and S0428: 1.		
HNGOI86	806013	4756	456 - 193	14508	Lys-43 to Thr-58, Asp-77 to Arg-88.	S0428: 2		
HNGOJ13	921433	4757	85 - 339	14509	His-5 to Asn-16,	S0052: 1 and S0428: 1.		

HNGOJ64	860193	4758	2 - 304	14510	Tyr-61 to Gly-71.	S0428: 2	
HNGOK59	789689	4759	108 - 242	14511	Ser-14 to Arg-25.	S0428: 2	
HNGOK86	784813	4760	203 - 442	14512	Pro-22 to Gln-28.	S0116: 1 and S0428: 1.	
HNGOL14	860185	4761	3 - 143	14513		S0052: 1 and S0428: 1.	
HNGOO22	953888	4762	3 - 155	14514		S0052: 1 and S0428: 1.	
HNGOP04	926972	4763	230 - 406	14515		S0428: 2	
HNGOP10	963483	4764	289 - 438	14516	Phe-4 to Thr-10, Pro-23 to Ser-30.	L0521: 2, H0305: 1, S0002: 1, S0428: 1, L0758: 1 and L0759: 1.	
HNGOS22	860176	4765	69 - 314	14517	Pro-8 to Ser-28.	S0134: 1 and S0428: 1.	
HNGOV03	922963	4766	53 - 286	14518	Phe-33 to Leu-39.	S0428: 2	
HNGOV65	921416	4767	2 - 187	14519		S0052: 2 and S0428: 1.	
HNGOW13	926929	4768	2 - 310	14520	Gln-11 to His-23, Glu-25 to Gly-41.	S0428: 2	
HNGOY01	915210	4769	162 - 359	14521	Thr-19 to Cys-27, Val-33 to Gly-39.	S0428: 2	
HNGOY10	915012	4770	3 - 386	14522	Ser-23 to Ala-30, Ala-44 to Ala-54.	H0457: 1 and S0428: 1.	
HNGOZ17	880777	4771	118 - 246	14523		S0052: 1 and S0428: 1.	
HNGPH12	969683	4772	174 - 353	14524		S0428: 2 and S0053: 1.	
HNGPI08	947384	4773	461 - 655	14525	Glu-17 to Gly-23.	S0428: 2 and L0766: 1.	
HNGPI23	855983	4774	250 - 507	14526	Pro-1 to Leu-7, Lys-14 to Trp-22, Leu-24 to Gly-30, Ser-47 to Gly-53, Gln-71 to Leu-86.	H0444: 2 and S0428: 1.	
HNGPJ51	805997	4775	136 - 288	14527		S0428: 2	
HNGPL91	959740	4776	177 - 350	14528	Ala-9 to Trp-16.	S0052: 1 and S0428: 1.	
HNGPN01	913782	4777	105 - 413	14529	Ser-17 to Ser-25.	S0428: 2	
HNGPN46	954997	4778	331 - 588	14530	Lys-1 to Asp-7.	S0428: 2	
HNGPP61	860145	4779	119 - 475	14531		S0428: 2	
HNGPR03	949269	4780	3 - 140	14532	Gln-39 to Cys-45.	S0428: 2	
HNGPS10	963469	4781	3 - 239	14533		S0428: 1 and S0216: 1.	
HNHAB29	860141	4782	2 - 145	14534	Arg-16 to Gly-23.	S0053: 2	

HNHAB93	527921	4783	3 - 149	14535	Gly-1 to Gly-9, Glu-24 to Gly-35.	S0053: 2		
HNHAF77	527971	4784	7 - 135	14536		S0053: 2		
HNHAG50	527815	4785	22 - 180	14537	Gly-10 to Trp-22, Pro-25 to Cys-32, Asp-35 to Ser-43.	S0053: 2		
HNHAG51	725898	4786	10 - 174	14538		S0053: 2		
HNHAG64	527809	4787	76 - 231	14539		S0053: 2		
HNHAH38	860118	4788	140 - 388	14540	Tyr-34 to Thr-39.	S0053: 2		
HNHAH84	527806	4789	89 - 235	14541	Lys-1 to Trp-10.	S0053: 2		
HNHAI11	967668	4790	81 - 377	14542	Gln-37 to Asn-42, Arg-47 to Lys-67.	L0766: 2, S0053: 2 and L0758: 1.		
HNHAI15	860128	4791	2 - 58	14543		S0053: 2		
HNHAI68	527572	4792	85 - 165	14544		S0053: 2		
HNHAJ59	703576	4793	274 - 417	14545		S0053: 1 and S0216: 1.		
HNHAK83	574391	4794	25 - 219	14546		S0053: 2		
HNHAP79	574384	4795	2 - 139	14547		S0053: 2		
HNHAW75	515480	4796	240 - 1	14548	Lys-19 to Gln-25, Leu-68 to Gly-73.	S0053: 2		
HNHBC30	693318	4797	93 - 230	14549		S0053: 1 and H0423: 1.		
HNHBE19	724404	4798	56 - 190	14550		S0053: 2		
HNHBH62	574387	4799	1 - 240	14551	Ser-1 to Phe-10, Leu-14 to Ile-19, Ser-41 to Ser-47, Ala-61 to Gly-66.	S0053: 2		
HNHBH72	577334	4800	241 - 399	14552	Thr-19 to Ser-27.	S0053: 2		
HNHBK22	574305	4801	66 - 272	14553	Arg-1 to Arg-7, Ala-16 to Ser-24.	S0053: 2 and S0216: 1.		
HNHBK59	959771	4802	2 - 286	14554	Arg-2 to Gly-11.	S0053: 2		
HNHBK80	721688	4803	82 - 240	14555		S0053: 2		
HNHBM63	574310	4804	135 - 302	14556		H0271: 1 and S0053: 1.		
HNHBM66	860119	4805	24 - 374	14557	Thr-42 to His-47, Leu-55 to Trp-60, Thr-75 to His-83, Pro-85 to Glu-96.	S0053: 2		

HNHBO20	793416	4806	460 - 666	14558	Tyr-8 to Ser-16.	S0052: 1, S0428: 1 and S0053: 1.	
HNHBO71	868059	4807	2 - 151	14559		S0053: 2	
HNHBO83	526746	4808	109 - 237	14560	Glu-22 to Val-33.	S0053: 2	
HNHBQ53	574090	4809	14 - 175	14561		S0053: 2	
HNHBS07	953850	4810	57 - 173	14562		S0053: 2	
HNHBS23	574048	4811	92 - 328	14563	Thr-1 to Lys-6, Gly-44 to Gly-51.	S0053: 2	
HNHBS38	925693	4812	493 - 963	14564	Val-23 to Asn-43, Ser-91 to Gln-107.	H0650: 1, S0428: 1 and S0053: 1.	
HNHBU20	669866	4813	129 - 257	14565	Lys-21 to Phe-27.	S0053: 2	
HNHBU21	574030	4814	138 - 332	14566	Thr-14 to Met-26.	S0053: 3	
	723352	9590	246 - 401	19342	Leu-12 to Ser-18.		
HNHBU37	574139	4815	3 - 338	14567	Thr-1 to Leu-8, Thr-50 to Lys-57.	S0053: 2	
HNHBU79	597123	4816	268 - 89	14568		S0053: 2	
HNHBU82	577193	4817	185 - 394	14569	Lys-8 to Arg-13, Ile-24 to Tyr-29, Arg-49 to Arg-60.	S0053: 2	
HNHBU91	765815	4818	62 - 232	14570	Thr-1 to Leu-6.	S0053: 2	
HNHBU92	753550	4819	12 - 254	14571	Glu-8 to Leu-16.	S0053: 3	
HNHBU93	757745	4820	71 - 229	14572		S0053: 2	
HNHBV55	574026	4821	85 - 219	14573	Leu-1 to Lys-8, Arg-19 to Cys-29.	S0053: 2	
HNHBY06	936012	4822	28 - 210	14574		S0053: 1 and S0216: 1.	
HNHBY45	774280	4823	213 - 389	14575		S0053: 1 and S0216: 1.	
HNHBY60	964712	4824	2 - 187	14576	Pro-7 to Ala-12.	S0053: 3	
HNHBY83	694401	4825	94 - 492	14577	His-21 to Asp-38, Glu-41 to Ile-53.	S0053: 2	
HNHBZ03	924873	4826	152 - 349	14578		S0053: 2	
HNHCC42	577343	4827	143 - 274	14579	Gly-15 to His-20.	S0053: 2	
HNHCD63	574309	4828	102 - 359	14580		S0053: 2	
HNHCE68	574028	4829	100 - 387	14581	Ser-4 to Gly-12.	S0053: 2	
HNHCJ25	679154	4830	3 - 311	14582	Arg-1 to Asn-13, Pro-35 to Ala-41.	S0053: 2	



HNHCJ35	860112	4831	3 - 182	14583			S0053: 2		
HNHCJ39	574084	4832	1 - 129	14584	Lys-14 to Ala-19, Ser-27 to Ser-34.		S0053: 2 and L0789: 1.		
HNHCJ68	753558	4833	65 - 250	14585	Lys-1 to Ala-11, Pro-19 to Lys-28, Ser-36 to Trp-41.		S0053: 2		
HNHCJ71	760565	4834	79 - 198	14586	Ser-13 to Cys-23.		S0053: 1 and S0216: 1.		
HNHCJ80	786033	4835	305 - 427	14587	Lys-12 to Arg-20.		S0053: 1 and H0436: 1.		
HNHCL20	780527	4836	3 - 257	14588	Leu-52 to Ser-60, Gln-63 to Leu-68.		AR050: 182, AR054: 144, AR051: 129 H0060: 1, S0428: 1 and S0053: 1.		
HNHCL38	574082	4837	1 - 225	14589	Gly-1 to Leu-11.		S0053: 2		
HNHCL47	719476	4838	50 - 277	14590	Ala-1 to Glu-9, Ser-14 to Leu-19, Gly-25 to Leu-41.		S0053: 2		
HNHCM80	573010	4839	9 - 293	14591			S0052: 1 and S0053: 1.		
HNHCN70	577186	4840	62 - 193	14592	Val-5 to Gln-14.		S0053: 2		
HNHCO27	574337	4841	64 - 198	14593	Ser-11 to Ala-24, Glu-30 to Lys-37, Cys-45 to Gly-54, Thr-101 to Ser-112.		S0053: 2		
HNHCO48	860641	4842	26 - 361	14594			S0052: 2 and S0053: 1.		
HNHCO64	574147	4843	61 - 246	14595			S0053: 2		
HNHCP18	666844	4844	2 - 172	14596	Pro-1 to Lys-6.		S0053: 2		
HNHCP22	934307	4845	284 - 586	14597	Phe-46 to Pro-54, Cys-69 to Glu-74.		S0428: 1 and S0053: 1.		
HNHCP37	866950	4846	197 - 373	14598			S0114: 1 and S0053: 1.		
HNHCP78	506696	4847	3 - 194	14599	Leu-3 to Arg-9.		S0053: 2		
HNHCP88	574341	4848	1 - 240	14600			S0053: 2		
HNHCQ70	757410	4849	3 - 263	14601			S0428: 1, S0053: 1, L0748: 1 and L0754: 1.		
HNHCU18	574394	4850	32 - 130	14602			S0053: 2		
HNHCU42	850918	4851	307 - 666	14603	Met-34 to Gly-43, Val-56 to Arg-62, Glu-85 to Gly-90.		H0457: 3, H0305: 1, H0589: 1 and S0053: 1.		

HNHCU57	735005	4852	3 - 239	14604	Gln-58 to Gly-65.	S0053: 2		
HNHCV72	766213	4853	221 - 343	14605		S0053: 1, S0216: 1 and L0439: 1.		
HNHCZ07	953881	4854	18 - 176	14606	Ala-33 to Trp-39.	H0650: 1 and S0053: 1.		
HNHCZ23	574325	4855	204 - 332	14607		S0053: 2		
HNHDA07	855988	4856	149 - 394	14608	Ser-1 to Ala-10, Leu-12 to Met-19, Ser-37 to Ser-46, Cys-52 to Leu-58, Pro-74 to Tyr-80.	S0053: 1, S0216: 1 and H0444: 1.		
HNHDA79	574350	4857	3 - 152	14609	Gln-15 to Gly-20.	S0053: 2		
HNHDA88	574150	4858	1 - 90	14610		S0053: 2		
HNHDB11	574323	4859	260 - 442	14611	Trp-7 to Gly-15, Thr-17 to Gln-31, Ser-40 to Ser-45.	S0053: 2		
HNHDB23	676290	4860	76 - 303	14612		S0053: 2		
HNHDB46	574329	4861	146 - 379	14613		S0053: 2		
HNHDB93	800661	4862	1 - 72	14614		S0053: 1 and S0216: 1.		
HNHDC26	574304	4863	145 - 300	14615		S0053: 2		
HNHDC47	708705	4864	22 - 189	14616		S0053: 2		
HNHDC83	577339	4865	192 - 434	14617	Ser-1 to Asn-13.	S0053: 2		
HNHDC95	734794	4866	13 - 105	14618		S0053: 2		
HNHDE38	709277	4867	132 - 260	14619	Ser-26 to Cys-31.	S0053: 1 and H0521: 1.		
HNHDF31	968249	4868	8 - 130	14620	Leu-13 to Ser-20, Glu-28 to Ser-33.	S0053: 2		
HNHDF48	574385	4869	61 - 174	14621		S0053: 2		
HNHDF06	936046	4870	2 - 226	14622	Arg-18 to Arg-23.	S0053: 2		
HNHDF60	860101	4871	49 - 210	14623		S0053: 2		
HNHDL62	577701	4872	29 - 193	14624	Gly-48 to Arg-54.	S0053: 2		
HNHDL90	789082	4873	116 - 397	14625	Arg-1 to Glu-6, Gln-25 to Gly-30, Pro-44 to Gly-56, Gly-60 to Trp-65.	S0053: 1 and S0216: 1.		
HNHDL94	773592	4874	201 - 326	14626	Gly-7 to Tyr-13.	S0053: 2		
HNHDM03	924713	4875	1 - 285	14627		S0053: 1 and S0216: 1.		

HNHDM40	711352	4876	93 - 254	14628	His-27 to Lys-38.	S0053: 2	
HNHDM50	724550	4877	33 - 281	14629	Cys-8 to Trp-19.	S0053: 2	
HNHDM74	506621	4878	263 - 436	14630	Asn-29 to Ser-35.	S0053: 2	
HNHDM27	573388	4879	2 - 187	14631		S0053: 2	
HNHDM79	735007	4880	178 - 273	14632		S0052: 1 and S0053: 1.	
HNHDP04	859988	4881	241 - 750	14633	Gly-17 to Gly-23.	S0053: 4	
HNHDP29	746093	4882	172 - 354	14634		S0053: 1 and S0216: 1.	
HNHMQ11	967334	4883	332 - 496	14635	Arg-8 to Gln-14, Lys-19 to Trp-38.	H0486: 1 and S0053: 1.	
HNHMQ17	573328	4884	132 - 293	14636	Ile-1 to Val-10.	S0053: 3	
HNHMQ35	707334	4885	1 - 126	14637	Lys-1 to Asn-16, Lys-18 to Cys-28.	H0264: 1 and S0053: 1.	
HNHMQ39	704560	4886	2 - 151	14638	Gln-1 to Trp-9.	S0053: 2	
HNHMQ56	577256	4887	322 - 507	14639	Leu-24 to Arg-29.	S0053: 3	
HNHMQ65	573357	4888	148 - 258	14640		S0053: 2	
HNHMQ71	496246	4889	143 - 400	14641		S0053: 2	
HNHMQ93	923817	4890	37 - 231	14642		S0053: 1 and H0445: 1.	
HNHMR10	968082	4891	1 - 189	14643	Asp-7 to Pro-14, Arg-19 to Met-27.	S0053: 2	
HNHMR28	685580	4892	25 - 240	14644	Glu-16 to Arg-34.	S0053: 2	
HNHMR71	575480	4893	51 - 230	14645	Arg-6 to Tyr-11, Asp-19 to Arg-26.	S0053: 2	
HNHDS27	683585	4894	70 - 213	14646	Tyr-39 to Asn-48.	S0053: 3	
HNHDS83	573347	4895	1 - 189	14647		S0053: 2	
HNHDS88	573349	4896	184 - 348	14648		S0053: 2	
HNHDT01	917004	4897	159 - 335	14649		H0271: 1 and S0053: 1.	
HNHDT28	887158	4898	2 - 397	14650		AR054: 9, AR051: 4, AR050: 2 S0053: 4	
HNHDT42	574455	4899	91 - 258	14651	Gln-1 to Phe-16.	S0052: 1 and S0053: 1.	
HNHDT54	728871	4900	75 - 407	14652	Pro-64 to Trp-76.	H0580: 1 and S0053: 1.	
HNHDT83	717796	4901	5 - 442	14653	Ser-1 to Asp-8, Pro-46 to Asp-51, Gly-84 to Pro-92.	S0053: 2	
HNHDTV50	506622	4902	3 - 209	14654	His-1 to Asn-7.	S0053: 2	

HNHDV84	750262	4903	3 - 242	14655	Ser-21 to Gln-35.	S0053: 2		
HNHDW78	723189	4904	1 - 285	14656	Leu-13 to Trp-25.	S0053: 2, S0052: 1 and S0428: 1.		
HNHDX80	779334	4905	98 - 298	14657	His-7 to Ser-12.	S0053: 1 and S0216: 1.		
HNHDX84	615272	4906	3 - 119	14658	His-1 to Ser-6.	S0053: 2		
HNHDY18	573329	4907	120 - 242	14659	Gly-11 to Met-16.	S0053: 2		
HNHDY37	582473	4908	19 - 123	14660	Asn-1 to Leu-20.	H0305: 1, L0761: 1, L0791: 1 and S0053: 1.		
HNHDY45	576776	4909	142 - 282	14661	Glu-1 to Gly-6, Val-40 to Phe-47.	S0052: 2 and S0053: 1.		
HNHDY50	924211	4910	2 - 175	14662		S0053: 2		
HNHDY54	945708	4911	1 - 546	14663	Ser-25 to Gly-33, Ser-43 to Trp-52.	AR061: 8, AR089: 2 S0053: 2		
HNHDY83	795954	4912	1 - 255	14664	Gly-1 to Asn-6, Pro-19 to Leu-28.	S0053: 2		
HNHDZ14	506738	4913	3 - 200	14665	His-1 to Pro-7, Ser-44 to Thr-50.	S0053: 2		
HNHDZ26	419716	4914	96 - 431	14666	Trp-1 to His-6, Leu-25 to Trp-37.	S0053: 2 and L0774: 1.		
HNHDZ69	573346	4915	72 - 182	14667		S0053: 2		
HNHEA06	835893	4916	110 - 331	14668	Leu-1 to Thr-14, Phe-30 to Phe-40.	H0581: 1 and S0053: 1.		
HNHEA21	574868	4917	1 - 243	14669		S0052: 1 and S0053: 1.		
HNHEA40	573327	4918	3 - 179	14670		S0053: 2		
HNHEA96	796491	4919	1 - 237	14671		S0053: 1 and S0216: 1.		
HNHEB47	573339	4920	3 - 182	14672	Tyr-34 to Ser-40, Arg-46 to Arg-56.	S0053: 2		
HNHEB88	412655	4921	51 - 140	14673		S0053: 2		
HNHEC40	576507	4922	112 - 267	14674	Glu-24 to Gly-30, Ser-38 to Gly-47.	S0053: 2		
HNHEC51	577306	4923	68 - 418	14675	Ala-3 to Ser-8, Pro-24 to Gly-35, Gly-51 to Thr-60.	S0053: 2 and H0271: 1.		
HNHEC96	796463	4924	1 - 291	14676	Pro-7 to Met-12, Gln-22 to Ser-28.	S0053: 1 and S0216: 1.		
HNHED02	920414	4925	188 - 340	14677	Cys-2 to Asn-8.	S0053: 2		

HNHED51	682992	4926	339 - 686	14678	Thr-5 to Gly-13.	S0053: 1 and H0436: 1.		
HNHED82	576541	4927	289 - 53	14679	Pro-17 to Leu-25, Gln-33 to Ser-41, Ala-62 to Ser-71, Ser-74 to Lys-79.	S0053: 2		
HNHED83	576540	4928	124 - 330	14680	Pro-9 to His-15, Lys-27 to Lys-34, Lys-40 to Ile-55.	S0053: 2		
HNHEE25	576512	4929	183 - 383	14681		S0053: 2		
HNHEE30	576440	4930	267 - 410	14682	His-8 to Cys-40.	S0053: 2		
HNHEE38	860073	4931	2 - 241	14683		S0053: 2		
HNHEE40	576442	4932	289 - 426	14684	Asp-13 to Ala-19, Thr-40 to Gly-46.	S0053: 2		
HNHEE49	576820	4933	74 - 313	14685		S0053: 2		
HNHEF01	916792	4934	53 - 337	14686	Pro-1 to Pro-6, Gly-58 to Glu-63, Gln-68 to Lys-77.	S0053: 2		
HNHEF73	576419	4935	3 - 206	14687	Lys-30 to Met-35.	S0053: 2		
HNHEG28	586443	4936	28 - 336	14688	Thr-1 to Thr-11, Val-15 to Lys-26, Lys-80 to Gly-87.	AR050: 77, AR051: 70, AR054: 67 S0053: 2		
HNHEG32	576426	4937	159 - 404	14689	Glu-1 to Leu-7, Ser-27 to Lys-32, Glu-36 to Glu-42, Ala-44 to Arg-53.	S0053: 2		
HNHEG49	576415	4938	270 - 383	14690		S0053: 2		
HNHEG68	861181	4939	192 - 299	14691		S0212: 1 and S0053: 1.		
HNHEG91	506278	4940	158 - 289	14692	Ile-24 to Val-29.	S0053: 2		
HNHEH04	582732	4941	64 - 171	14693	Glu-27 to Gly-36.	S0053: 2		
HNHEH37	490514	4942	509 - 204	14694	Ile-29 to Ser-42, Glu-66 to Ala-92.	S0053: 2		
	860064	9591	122 - 331	19343	Ala-12 to Cys-17, Glu-20 to Leu-30.			
HNHEH41	578589	4943	1 - 228	14695	Gln-1 to Arg-15.	H0073: 1 and S0053: 1.		
HNHEH51	678114	4944	234 - 389	14696		S0053: 2		
HNHEH52	860021	4945	67 - 372	14697	Thr-11 to Thr-18,	S0053: 2		

HNHEH60	576517	4946	27 - 170	14698	Thr-31 to Glu-40. Arg-1 to Arg-6, His-24 to Glu-32.	S0053: 2		
HNHEI06	923080	4947	220 - 375	14699		S0053: 1 and S0216: 1.		
HNHEI64	576549	4948	191 - 313	14700		S0053: 2		
HNHEJ07	953586	4949	59 - 325	14701		S0053: 1, S0216: 1 and L0594: 1.		
HNHEJ11	967265	4950	1 - 237	14702	Glu-1 to Asp-13.	S0053: 1 and S0216: 1.		
HNHEJ23	576533	4951	19 - 288	14703	Tyr-1 to Phe-8, Gly-21 to His-34, Gly-42 to Gly-52, Gly-57 to Asn-64, Leu-81 to Pro-86.	S0053: 3		
HNHEJ24	916556	4952	78 - 230	14704		S0053: 2		
HNHEJ44	716723	4953	106 - 207	14705	Ser-1 to Cys-6.	S0053: 2		
HNHEJ57	576535	4954	148 - 246	14706		S0053: 2		
HNHEJ85	964882	4955	1 - 162	14707	Ala-24 to Glu-31, Asn-39 to Gly-46.	H0063: 1 and S0053: 1.		
HNHEK01	916790	4956	223 - 465	14708	Cys-17 to Ser-25.	H0589: 1 and S0053: 1.		
HNHEK63	576819	4957	1 - 465	14709	Gly-1 to Leu-6, Gly-40 to Arg-46, Cys-73 to Ser-80.	S0053: 2		
HNHEK79	954548	4958	43 - 165	14710		S0114: 1 and S0053: 1.		
HNHEK83	576420	4959	3 - 212	14711	Glu-4 to Thr-11, Ile-35 to Asn-46.	S0053: 2		
HNHEL09	576418	4960	3 - 116	14712	Lys-26 to Asn-34.	S0053: 2		
HNHEL37	713723	4961	345 - 223	14713		S0053: 1 and H0521: 1.		
HNHEL42	859830	4962	209 - 412	14714		S0053: 1 and S0216: 1.		
HNHEL44	576423	4963	3 - 212	14715		S0053: 2		
HNHEL53	506281	4964	124 - 273	14716		S0053: 2		
HNHEL82	576430	4965	246 - 386	14717		S0053: 2 and H0589: 1.		
HNHEL94	786930	4966	1 - 249	14718	Lys-17 to Gln-22.	H0421: 2 and S0053: 1.		
HNHEM04	950725	4967	2 - 154	14719		S0053: 2		
HNHEM34	860047	4968	3 - 170	14720	Arg-38 to Lys-43.	S0428: 1 and S0053: 1.		
HNHEM35	576424	4969	156 - 341	14721		S0053: 2		

HNHEM83	825354	4970	30 - 425	14722		S0052: 2, S0216: 2 and S0053: 1.		
HNHEM85	783480	4971	178 - 345	14723	Leu-2 to Ser-20, Lys-50 to Phe-56.	H0264: 1 and S0053: 1.		
HNHEN02	920420	4972	210 - 311	14724		S0053: 2		
HNHEN16	615402	4973	2 - 292	14725		S0053: 2		
HNHEN56	733521	4974	182 - 346	14726		H0264: 1, S0053: 1 and L0600: 1.		
HNHEN66	576544	4975	40 - 255	14727	Pro-25 to Pro-32.	S0053: 2		
HNHEN76	576542	4976	1 - 237	14728	Ala-28 to Gln-44.	S0053: 2 and S0428: 1.		
HNHEO29	576548	4977	120 - 440	14729	His-10 to Thr-16.	S0053: 2		
HNHEO43	860046	4978	175 - 348	14730		H0556: 1 and S0053: 1.		
HNHEO83	706683	4979	17 - 172	14731	His-15 to Gly-20, Ser-36 to Glu-47.	S0053: 2		
HNHEO84	859992	4980	102 - 272	14732	Thr-3 to Lys-9, Cys-50 to Arg-56.	S0053: 2		
HNHEP49	576453	4981	3 - 281	14733	Pro-1 to Cys-14, Glu-40 to Ser-48.	S0053: 2		
HNHEQ07	953577	4982	141 - 314	14734	Thr-8 to Asp-19.	S0053: 2 and S0428: 1.		
HNHEQ46	576437	4983	168 - 311	14735		S0053: 2		
HNHEQ60	576455	4984	2 - 133	14736	Ala-1 to Arg-6.	S0053: 2		
HNHEQ70	577188	4985	73 - 426	14737	Arg-1 to Cys-9, Leu-64 to Gly-75.	S0053: 2		
HNHEQ92	576456	4986	56 - 226	14738	His-24 to Ile-29, Tyr-31 to Asn-41.	S0053: 2		
HNHEQ94	577303	4987	121 - 249	14739	Glu-26 to Gln-37.	S0053: 2		
HNHER06	918651	4988	1 - 285	14740	Gln-11 to His-19, Ala-25 to Glu-38.	S0053: 1 and S0216: 1.		
HNHER21	496484	4989	92 - 529	14741	Pro-8 to Arg-13, Ser-33 to Val-38, Ile-50 to Ala-57.	S0053: 2		
HNHES05	932092	4990	1 - 123	14742		S0053: 2		
HNHES06	859833	4991	2 - 292	14743		S0053: 1 and S0216: 1.		
HNHES07	953443	4992	55 - 183	14744	Asn-3 to Gln-9.	S0053: 2		
HNHES11	967128	4993	92 - 268	14745	Glu-1 to Pro-12,	S0053: 2		

HNHES23	675946	4994	258 - 46	14746	Pro-28 to Gly-37. Lys-53 to Asn-64.	L0766: 4, L0789: 1, S0052: 1 and S0053: 1.		
HNHES35	576497	4995	80 - 325	14747	Pro-1 to Ala-7.	S0053: 2		
HNHES56	881504	4996	91 - 393	14748	Ile-86 to Ser-93.	H0305: 1 and S0053: 1.		
HNHES61	973297	4997	186 - 407	14749	Asp-14 to Gln-23, Arg-31 to Gln-38, Ile-42 to Gln-47.	S0053: 2		
HNHES81	777979	4998	157 - 384	14750	Leu-15 to Gly-28, Val-44 to Cys-50.	S0053: 2		
HNHET11	967127	4999	216 - 371	14751	Asp-14 to Phe-19, Glu-34 to Asn-43.	S0053: 2		
HNHET17	576746	5000	110 - 322	14752	Gly-31 to Gly-37, Pro-39 to Ala-46, Cys-50 to Glu-60.	S0052: 1 and S0053: 1.		
HNHET24	860006	5001	90 - 338	14753	Pro-49 to Asp-54, Ser-65 to Trp-73.	S0053: 2		
HNHET25	953410	5002	63 - 362	14754	Ser-29 to Tyr-40, Ala-62 to Ala-85.	S0053: 2		
HNHET57	577360	5003	240 - 458	14755		S0052: 1 and S0053: 1.		
HNHEU50	724449	5004	78 - 254	14756	Arg-25 to Asn-36.	S0053: 2		
HNHEU60	576387	5005	2 - 253	14757	Gln-19 to Gly-26.	S0053: 2		
HNHEU71	574396	5006	111 - 290	14758		S0053: 2		
HNHEV25	577111	5007	3 - 131	14759	Cys-26 to Gln-35.	S0053: 2		
HNHEV44	716661	5008	3 - 206	14760		L0748: 2, H0402: 1, L0664: 1 and S0053: 1.		
HNHEV46	577337	5009	3 - 182	14761	Glu-22 to Gly-31.	S0053: 2		
HNHEV49	575777	5010	108 - 308	14762	Glu-30 to His-35.	S0053: 2		
HNHEW03	924475	5011	116 - 298	14763	Asp-1 to Ser-16, Trp-43 to Ile-51.	S0052: 1, S0053: 1 and H0444: 1.		
HNHEW14	658506	5012	31 - 336	14764	Gln-13 to Gly-26.	L0361: 2, S0428: 1 and S0053: 1.		
HNHEW19	953446	5013	170 - 3	14765		S0053: 2		
HNHEW21	670987	5014	69 - 197	14766		S0053: 3		
HNHEW75	576361	5015	146 - 244	14767		S0053: 2		



HNHEW76	770081	5016	56 - 196	14768			S0053: 2	
HNHEW95	953566	5017	3 - 257	14769	His-1 to Arg-9, Arg-47 to Cys-62.		S0053: 2	
HNHEX12	970764	5018	168 - 374	14770			S0053: 2	
HNHEX40	711225	5019	289 - 426	14771	Cys-3 to Cys-12, Gly-16 to Glu-26, Leu-30 to Ile-36.		H0271: 1 and S0053: 1.	
HNHEX54	575783	5020	1 - 267	14772	Gly-1 to Gly-6, Ala-15 to Gly-20, Pro-31 to Arg-52, Leu-79 to Gly-88.		S0053: 2	
HNHEX66	860036	5021	101 - 424	14773			S0053: 4	
HNHEX77	860037	5022	205 - 432	14774	Pro-8 to Val-15, Pro-53 to Gln-58.		S0053: 3	
HNHEY59	959668	5023	3 - 191	14775	Thr-19 to Cys-32.		S0053: 2	
HNHEY63	575741	5024	263 - 397	14776			S0053: 2	
HNHEY93	575745	5025	1 - 99	14777			S0053: 2	
HNHEZ07	953438	5026	49 - 153	14778	Leu-24 to Cys-29.		H0318: 1 and S0053: 1.	
HNHEZ18	575788	5027	3 - 104	14779	Gln-3 to Lys-10, Asp-18 to Leu-24.		S0053: 2	
HNHEZ19	887442	5028	3 - 266	14780	Pro-16 to Gln-21.		AR054: 7, AR051: 1, AR050: 0 S0053: 2	
HNHFA05	860033	5029	1 - 267	14781	Ser-7 to Gly-22, Trp-41 to Thr-48, Pro-56 to Ser-65, Gln-73 to Leu-82.		S0053: 1 and S0216: 1.	
HNHFA11	967126	5030	179 - 361	14782			H0305: 1 and S0053: 1.	
HNHFA35	577302	5031	19 - 219	14783	Thr-1 to Ala-12.		S0053: 3	
HNHFA59	576394	5032	258 - 413	14784			S0053: 2	
HNHFB09	575786	5033	200 - 430	14785			S0053: 2	
HNHFB19	668713	5034	118 - 270	14786			S0053: 1 and H0444: 1.	
HNHFB27	576865	5035	86 - 427	14787	Leu-5 to Pro-11.		H0341: 1 and S0053: 1.	
HNHFB32	836006	5036	274 - 444	14788			S0053: 2	
HNHFB39	575740	5037	178 - 348	14789	Pro-3 to Cys-26.		S0053: 2	
hnhfb53	728265	5038	233 - 406	14790			S0053: 2	

HNHFC34	860027	5039	3 - 182	14791	His-1 to Arg-10, Asn-20 to Trp-37, Arg-39 to Pro-47, Glu-53 to Asn-60.	S0053: 2	
HNHFC43	583660	5040	277 - 104	14792	Ile-3 to Val-11, Pro-39 to Lys-45.	S0052: 1 and S0053: 1.	
	590226	9592	349 - 215	19344			
	973274	9593	484 - 771	19345			
HNHFC60	576438	5041	95 - 343	14793		S0053: 2	
HNHFC61	577185	5042	72 - 242	14794	Glu-10 to Val-32.	S0053: 2	
HNHFC67	576385	5043	46 - 312	14795	Lys-3 to Pro-9.	S0053: 2	
HNHFC78	576435	5044	97 - 303	14796	Ala-30 to Gly-43, Ser-53 to Ala-66.	S0053: 2	
HNHFC92	577240	5045	33 - 236	14797		S0053: 2	
HNHFD46	576796	5046	122 - 382	14798	Phe-4 to Gly-9, Thr-29 to Glu-52.	S0053: 2	
HNHFD88	506354	5047	2 - 358	14799		S0052: 1 and S0053: 1.	
HNHFE07	953585	5048	65 - 3	14800		S0053: 2	
HNHFE40	576431	5049	148 - 336	14801		S0053: 2	
HNHFE69	577244	5050	1 - 225	14802		S0053: 2	
HNHFF08	860229	5051	434 - 607	14803	Lys-24 to Lys-31.	S0428: 4, S0116: 1, H0179: 1 and S0053: 1.	
HNHFF21	625613	5052	239 - 340	14804		S0053: 2	
HNHFF29	576412	5053	50 - 280	14805	Arg-11 to Gly-19.	S0053: 2	
HNHFF56	576432	5054	157 - 390	14806	Pro-27 to Pro-32.	S0053: 2	
HNHFG07	953569	5055	265 - 399	14807	Leu-1 to Tyr-11.	S0053: 2	
HNHFG11	967255	5056	59 - 283	14808		S0053: 1 and H0444: 1.	
HNHFG37	658459	5057	1 - 405	14809	Lys-22 to Gly-37, Thr-46 to Asp-51, Arg-72 to Asp-77.	S0053: 2	
HNHFG94	720292	5058	129 - 341	14810	Gly-1 to Trp-10, Pro-13 to Pro-25.	S0053: 1 and H0521: 1.	
HNHFH21	575785	5059	252 - 590	14811	Ala-26 to Phe-31, Ala-35 to Gly-42.	S0053: 2 and L0740: 1.	
HNHFH56	575784	5060	1 - 177	14812		S0053: 2	

HNHFH78	773610	5061	142 - 399	14813	Gly-8 to Trp-14.	S0053: 2	
HNHFI69	575747	5062	3 - 89	14814	Lys-22 to Glu-29.	S0053: 2	
HNHFI88	575751	5063	3 - 182	14815	Ala-40 to Ser-47.	S0053: 2	
HNHFI95	577328	5064	260 - 406	14816		S0053: 2	
HNHFJ45	720757	5065	172 - 435	14817	Glu-25 to Arg-31, Arg-35 to Gly-41, Asn-56 to Leu-61.	S0053: 2 and S0216: 1.	
HNHFJ67	699523	5066	265 - 143	14818	Asn-1 to Arg-10, Asp-13 to Met-20.	S0053: 2, L0748: 1 and L0758: 1.	
HNHFK37	576386	5067	34 - 336	14819	Asn-31 to Ser-37, Ser-78 to Gly-97.	S0053: 3	
HNHFK77	970770	5068	43 - 453	14820	Glu-1 to Glu-9, Val-14 to Gly-19, Lys-25 to Thr-32.	S0053: 3	
HNHFL48	664588	5069	3 - 122	14821	Val-6 to Ala-15.	S0053: 2	
HNHFL82	576428	5070	45 - 398	14822	Leu-1 to Ser-9.	S0053: 2	
HNHFM01	916787	5071	178 - 303	14823		S0053: 2	
HNHFM32	577331	5072	14 - 358	14824		S0053: 2	
HNHFN30	691083	5073	80 - 220	14825		S0053: 2	
HNHFN52	727258	5074	1 - 165	14826	Gly-1 to Gln-12.	S0053: 2	
HNHFN95	761672	5075	46 - 180	14827		S0053: 2	
HNHFO45	576408	5076	180 - 338	14828	Val-1 to Gln-6.	S0053: 2	
HNHFO48	707311	5077	17 - 292	14829	Gln-23 to His-32, Pro-48 to Leu-55.	H0416: 1, S0053: 1 and L0439: 1.	
HNHFP09	860013	5078	85 - 279	14830		S0053: 1 and S0216: 1.	
HNHFP10	964849	5079	284 - 430	14831	Leu-20 to Gly-27.	S0053: 2	
HNHFAQ01	916773	5080	2 - 301	14832	Ala-1 to Ala-6, Ala-29 to Leu-40, Ser-65 to Tyr-77.	H0179: 1 and S0053: 1.	
HNHFAQ19	418108	5081	1 - 162	14833	Trp-1 to Trp-6.	S0053: 2	
HNHFAQ30	692807	5082	1 - 285	14834	Thr-7 to Cys-13.	S0053: 2	
HNHFAQ75	766595	5083	27 - 356	14835		S0053: 2	
HNHFAQ88	576398	5084	1 - 204	14836	Thr-17 to Gly-25.	S0053: 2	
HNHFAQ92	576400	5085	111 - 1	14837		S0053: 2	
HNHFR12	860003	5086	127 - 315	14838	Arg-1 to Gln-14,	S0053: 2	

HNHFR22	964716	5087	19 - 444	14839	Gly-23 to Met-29.			
HNHFR24	577330	5088	136 - 336	14840	Arg-92 to Gly-98.	S0052: 1 and S0053: 1.		
HNHFR67	751787	5089	1 - 228	14841	Lys-7 to Thr-13.	S0053: 2		
HNHFS03	924610	5090	108 - 473	14842	Thr-1 to Lys-11.	S0053: 2		
HNHFS79	734798	5091	2 - 151	14843	Thr-1 to Asp-10, Arg-49 to Gln-55.	H0271: 1 and S0053: 1.		
HNHFU09	625726	5092	191 - 406	14844	Glu-4 to Glu-9, Glu-11 to Ser-19, Pro-24 to Cys-33.	S0053: 2		
HNHFU35	707335	5093	184 - 312	14845		S0053: 2		
HNHFU45	920844	5094	91 - 444	14846		H0073: 1 and S0053: 1.		
HNHFU57	860002	5095	1 - 171	14847	Lys-9 to Gly-16.	S0053: 2		
HNHFV16	952376	5096	77 - 373	14848	Leu-14 to Asn-29, Pro-45 to Arg-52, Ala-58 to Gly-65.	S0053: 1 and S0216: 1.		
HNHFV52	576390	5097	34 - 399	14849		S0053: 2		
HNHFV56	724417	5098	281 - 475	14850		S0052: 1 and S0053: 1.		
HNHFV66	860000	5099	3 - 173	14851	Asn-1 to Glu-24.	S0053: 2		
HNHFV68	925820	5100	86 - 346	14852		H0255: 2 and S0053: 1.		
HNHFV70	757281	5101	150 - 329	14853		S0053: 1 and S0216: 1.		
HNHFW08	959476	5102	1 - 297	14854	Glu-30 to Pro-50.	S0053: 2		
HNHFW29	663912	5103	3 - 338	14855	Pro-11 to Ala-16, Ser-24 to Thr-34.	S0053: 2		
HNHFX22	674638	5104	3 - 131	14856	Arg-17 to Val-26, Asn-28 to Gly-35, Arg-37 to Leu-42.	S0053: 2 and H0436: 2.		
HNHFX35	668656	5105	3 - 356	14857	His-1 to Gly-9, Pro-23 to Gly-28, Gln-66 to His-75.	S0053: 2		
HNHFX56	716628	5106	1 - 237	14858		S0053: 2		
HNHFX68	753045	5107	109 - 38	14859		S0053: 2		
HNHFX70	756459	5108	62 - 370	14860	Ser-53 to Asn-77.	S0052: 1 and S0053: 1.		
HNHFX89	712347	5109	258 - 425	14861	Gln-8 to Ser-16.	S0053: 2		
HNHFX21	670946	5110	2 - 169	14862	Lys-18 to Tyr-35.	S0053: 2		

HNHFY95	734764	5111	24 - 164	14863			S0053: 2		
HNHGA24	967093	5112	200 - 373	14864	Pro-4 to Lys-19.		S0053: 2 and H0271: 1.		
HNHGA33	702461	5113	50 - 166	14865	Lys-1 to Ile-6.		S0053: 2		
HNHGA46	719073	5114	1 - 156	14866	Thr-45 to Lys-52.		S0053: 3		
HNHGB83	781205	5115	37 - 174	14867			S0053: 2		
HNHGB96	784362	5116	123 - 233	14868			S0053: 2		
HNHGC13	927065	5117	121 - 222	14869			S0053: 1 and S0216: 1.		
HNHGC35	707337	5118	58 - 267	14870	Phe-17 to Arg-22, Tyr-31 to Ser-36, Gly-55 to Arg-70.		H0421: 1 and S0053: 1.		
HNHGC41	711654	5119	3 - 224	14871	His-1 to Lys-6, Gly-24 to Ser-40, Ser-53 to Arg-58, Leu-68 to Ser-74.		S0053: 2		
HNHGC62	733745	5120	478 - 654	14872			L0748: 4, S0053: 1 and H0187: 1.		
HNHGD07	953416	5121	1 - 420	14873	Gly-1 to Gly-6, Ser-11 to Pro-19.		S0053: 2		
HNHGD14	920149	5122	177 - 323	14874	Tyr-12 to Phe-24.		S0053: 2		
HNHGD50	667930	5123	2 - 172	14875	Pro-5 to Pro-17, Pro-46 to Lys-51.		S0053: 2		
HNHGD51	934632	5124	105 - 281	14876	Leu-3 to Arg-8.		S0216: 2 and S0053: 1.		
HNHGD68	753053	5125	74 - 307	14877			S0053: 2		
HNHGD84	671077	5126	165 - 332	14878			S0053: 2		
HNHGE09	939727	5127	22 - 645	14879	His-8 to Gly-18, Glu-35 to Thr-41, Arg-53 to Asp-59, Glu-82 to Pro-94.		AR089: 1, AR061: 1 S0053: 2		
HNHGE27	683432	5128	322 - 197	14880	Met-1 to Arg-6, Asn-36 to Ala-42.		S0052: 1 and S0053: 1.		
HNHGE43	715304	5129	65 - 325	14881	Arg-46 to Lys-51.		S0053: 1 and S0216: 1.		
HNHGE64	746605	5130	3 - 104	14882	Thr-15 to Glu-21, Ser-23 to Ser-32.		S0053: 2		
HNHGF14	835984	5131	13 - 387	14883	Arg-6 to Pro-19.		S0053: 2		
HNHGF21	670956	5132	54 - 251	14884	Arg-8 to Trp-14, Arg-18 to Ala-23.		S0053: 2		

HNHGF37	708708	5133	164 - 331	14885	Leu-58 to Leu-63.	S0053: 2	
HNHGF45	859852	5134	70 - 384	14886	Ala-23 to Gly-28.	S0053: 1 and S0216: 1.	
HNHGF46	705128	5135	21 - 425	14887	Ser-28 to Glu-33.	S0052: 1 and S0053: 1.	
HNHGF85	761811	5136	2 - 208	14888	Leu-12 to Ser-33, Ala-42 to Leu-48, Ser-57 to Pro-65.	S0053: 1 and S0216: 1.	
HNHGF90	730957	5137	2 - 280	14889	Ala-7 to Ala-17, Ser-32 to Gly-42, Glu-61 to Lys-69.	S0053: 2	
HNHGF91	750389	5138	276 - 431	14890	Leu-62 to Pro-69.	S0052: 1 and S0053: 1.	
HNHGG06	935530	5139	146 - 310	14891	Ala-40 to Thr-46.	S0053: 2 and L0748: 2.	
HNHGG73	764446	5140	76 - 231	14892		S0053: 2	
HNHGG76	746607	5141	1 - 198	14893	Asp-53 to Trp-63.	S0053: 3	
HNHGG89	772213	5142	73 - 303	14894	Lys-12 to Arg-23.	S0053: 2	
HNHGG93	792335	5143	22 - 195	14895	Gly-30 to Phe-38.	S0053: 1 and S0216: 1.	
HNHGG95	760386	5144	1 - 411	14896	Arg-53 to Gln-62, Pro-79 to Ser-84.	S0053: 2	
HNHGH02	920147	5145	3 - 257	14897	His-1 to Arg-9, Pro-44 to Gln-49.	S0052: 1 and S0053: 1.	
HNHGH20	959499	5146	2 - 241	14898	Val-22 to His-42, Arg-57 to His-62, His-75 to Arg-80.	S0053: 2	
HNHGH42	713036	5147	2 - 175	14899	Gly-26 to Gly-37.	S0053: 3	
HNHGI35	707336	5148	124 - 303	14900	Pro-18 to Arg-27.	S0053: 2	
HNHGI79	775218	5149	3 - 143	14901	Asp-13 to Trp-23.	S0053: 2	
HNHGI81	576279	5150	157 - 345	14902		S0052: 2 and S0053: 1.	
HNHGI03	968076	5151	1 - 225	14903	Phe-69 to Ile-75.	S0053: 1 and S0216: 1.	
HNHGI09	625624	5152	193 - 312	14904	Ser-1 to Trp-9, Pro-15 to Glu-26.	S0053: 2	
HNHGI20	668916	5153	173 - 397	14905	Cys-4 to Leu-10, Pro-12 to Gly-21, Ile-31 to Asn-38.	S0053: 2	
HNHGI28	686733	5154	96 - 323	14906	Glu-34 to Thr-42.	S0053: 3	
HNHGI39	850088	5155	3 - 167	14907	Ala-1 to Leu-8.	H0402: 1 and S0053: 1.	

HNHGG65	750269	5156	146 - 418	14908	Gly-26 to Ala-42, Thr-51 to Gly-58.	S0053: 2		
HNHGG81	777958	5157	172 - 402	14909	Gln-12 to Ser-17.	S0053: 2		
HNHGGK05	935525	5158	111 - 260	14910		S0053: 2		
HNHGGK24	783674	5159	117 - 335	14911	His-2 to Gln-8, Pro-67 to Ala-73.	S0053: 1 and S0216: 1.		
HNHGGK70	728593	5160	2 - 421	14912		S0053: 2	19q13.3-q13.4	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 191044, 258501, 600040, 600138, 602225, 602225
HNHGN17	663923	5161	139 - 273	14913		S0052: 1 and S0053: 1.		
HNHGO21	670955	5162	2 - 289	14914	Pro-45 to Glu-59, Gly-66 to Leu-73.	S0053: 2		
HNHGO65	750267	5163	3 - 92	14915		S0053: 2		
HNHGO68	732370	5164	106 - 324	14916	Arg-1 to Gly-9, Arg-17 to His-29, Met-40 to Arg-47, His-51 to Pro-61.	S0053: 2		
HNHGP08	859964	5165	2 - 97	14917	Arg-2 to Leu-11.	S0053: 2		
HNHGP31	698047	5166	3 - 284	14918	Ser-9 to Leu-15, His-57 to Cys-64, Glu-84 to Arg-94.	S0053: 2		
HNHGP32	699292	5167	161 - 268	14919	Gln-1 to Glu-6, Arg-20 to Met-25.	S0053: 2		
HNHGP40	916551	5168	233 - 391	14920	Ile-17 to Pro-26.	S0053: 2		
HNHGP73	934446	5169	8 - 163	14921		S0053: 1 and S0216: 1.		
HNHGP83	780328	5170	65 - 346	14922	Pro-31 to Gly-43, Leu-48 to Asn-57, Lys-87 to Ser-94.	S0053: 1 and S0216: 1.		
HNHQQ02	920146	5171	129 - 404	14923	Gln-35 to Gly-46, Ser-54 to Phe-59, Val-64 to Gly-74.	S0053: 3		
HNHQQ25	678151	5172	250 - 447	14924		S0053: 2		

HNHGQ28	859965	5173	52 - 447	14925	Thr-58 to Cys-63, Ala-99 to Ser-104.	S0053: 2	
HNHGQ49	573340	5174	280 - 471	14926	Met-37 to Gln-44.	S0053: 2	
HNHGQ79	562748	5175	342 - 500	14927	Leu-22 to His-33, Ala-46 to Leu-53.	S0053: 2	
	581933	9594	348 - 506	19346	Leu-22 to His-33, Ala-46 to Leu-53.		
HNHGR35	698501	5176	147 - 329	14928	Phe-4 to Ile-17.	S0053: 2	
HNHGR43	918711	5177	108 - 314	14929		S0053: 1 and S0216: 1.	
HNHGS34	706671	5178	97 - 435	14930	Gly-63 to Gln-69, Asp-84 to Ser-89, Val-103 to Asn-112.	S0053: 2	
HNHGT37	708706	5179	3 - 275	14931		S0053: 2	
HNHGT51	859962	5180	146 - 367	14932	Leu-6 to Gln-15.	S0053: 2	
HNHGT64	725710	5181	122 - 328	14933	Asn-1 to Leu-6.	S0053: 2	
HNHGT74	765602	5182	71 - 445	14934		S0053: 2	
HNHGU19	668693	5183	179 - 421	14935		S0053: 2	
HNHGU41	791822	5184	362 - 499	14936		S0053: 1 and S0216: 1.	
HNHGU44	716634	5185	61 - 264	14937		S0053: 2	
HNHGU84	783041	5186	18 - 56	14938		S0053: 2	
HNHGU89	761837	5187	161 - 355	14939	Ser-4 to Pro-11.	S0053: 2 and S0216: 1.	
HNHGV18	666473	5188	198 - 329	14940		S0053: 2	
HNHGV22	674653	5189	1 - 195	14941	Gly-1 to His-36.	S0053: 2	
HNHGV29	421819	5190	2 - 322	14942	Pro-35 to Leu-48.	S0053: 2	
HNHGV45	754053	5191	3 - 287	14943	His-1 to Lys-8.	S0053: 2	
HNHGV91	706695	5192	266 - 379	14944		S0053: 2	
HNHGX33	496224	5193	23 - 262	14945	Thr-1 to Ser-6, Pro-28 to Trp-37, Phe-51 to Ile-61.	S0053: 2	
HNHGX40	687120	5194	113 - 358	14946		S0053: 2	
HNHGX41	711657	5195	384 - 614	14947		S0052: 1 and S0053: 1.	
HNHGX52	727175	5196	47 - 385	14948	Pro-16 to Arg-25, Gln-31 to Pro-36, Ser-65 to Arg-75, Glu-77 to Val-82.	S0053: 2	



HNHGX55	683523	5197	71 - 310	14949	Phe-30 to Asp-36.	S0053: 2	
HNHGX83	781196	5198	3 - 251	14950		S0053: 1 and S0216: 1.	
HNHGY13	657253	5199	143 - 334	14951		S0053: 2	
HNHGY17	663921	5200	108 - 281	14952	Asp-1 to Pro-8, Leu-29 to Asp-35.	S0053: 2	
HNHGY18	859951	5201	175 - 423	14953	Pro-22 to His-39, Val-41 to Gly-48.	S0053: 2	
HNHGY19	835531	5202	2 - 349	14954	Asp-21 to Ser-27, Ser-76 to Ser-85.	S0053: 2	
HNHGY26	859949	5203	20 - 205	14955	Arg-6 to Cys-12, Leu-56 to Met-62.	S0053: 2 and S0216: 1.	
HNHGY29	690666	5204	87 - 368	14956	Arg-19 to Pro-33, Pro-39 to Ser-54.	H0271: 1 and S0053: 1.	
HNHGY42	713797	5205	1 - 243	14957	Leu-46 to Glu-55.	S0053: 2	
HNHGY47	720360	5206	45 - 374	14958	Asp-10 to Trp-15.	S0053: 2 and L0476: 1.	
HNHGY79	775209	5207	2 - 199	14959	Ala-1 to Lys-7, Leu-18 to Gln-35.	S0053: 2	
HNHGY86	785516	5208	129 - 1	14960		S0053: 2	
HNHGY91	840129	5209	209 - 433	14961	Gly-2 to Asn-11.	S0428: 1 and S0053: 1.	
HNHGX36	708131	5210	2 - 85	14962	Ala-14 to Val-28.	S0053: 2	
HNHGX63	742594	5211	209 - 421	14963		S0052: 1 and S0053: 1.	
HNHHA21	496227	5212	3 - 278	14964	Gly-59 to Asp-78.	S0053: 2	
HNHHA32	669915	5213	2 - 280	14965		H0271: 1 and S0053: 1.	
HNHHA37	708709	5214	2 - 166	14966	Pro-45 to Gln-54.	S0053: 2	
HNHHA68	753047	5215	258 - 497	14967		S0053: 1 and S0216: 1.	
HNHHA91	790198	5216	45 - 284	14968	Lys-14 to Cys-19.	S0053: 1 and S0216: 1.	
HNHHA11	964993	5217	61 - 159	14969	Asp-10 to Gly-18.	S0053: 2	
HNHHA12	970719	5218	107 - 247	14970	Thr-6 to Ser-20.	S0053: 2	
HNHHA24	677224	5219	141 - 332	14971		S0053: 2	
HNHHA64	702697	5220	354 - 614	14972	Lys-16 to Ser-31.	S0052: 1, S0053: 1, H0521: 1 and L0752: 1.	
HNHHC12	967088	5221	95 - 304	14973	Met-6 to Glu-13, Arg-15 to Trp-20.	S0053: 2	
HNHHC17	860117	5222	83 - 316	14974		S0053: 3	
HNHHC29	713800	5223	1 - 180	14975		S0053: 3 and L0589: 2.	

HNHHC33	699291	5224	100 - 186	14976		S0053: 2	
HNHHC36	707340	5225	159 - 37	14977	Cys-1 to Ile-11.	S0053: 3	
HNHHC46	719068	5226	1 - 252	14978	Gln-14 to Met-19.	S0053: 2	
HNHHC58	736069	5227	3 - 239	14979		S0053: 2	
HNHHC83	781197	5228	35 - 439	14980	Asp-1 to Ala-6, Pro-23 to Leu-30.	S0053: 2	
HNHHD35	707338	5229	41 - 190	14981	Ser-38 to Ser-48.	S0053: 2	
HNHHD61	741837	5230	153 - 419	14982	Lys-21 to Pro-41.	S0053: 3	
HNHHD67	751663	5231	152 - 319	14983	Thr-30 to Pro-40.	S0053: 3	
HNHHD82	779893	5232	223 - 405	14984	Met-6 to Arg-12.	S0053: 3	
HNHHE07	953408	5233	33 - 290	14985	Leu-11 to Glu-17.	S0053: 2	
HNHHE48	630223	5234	100 - 312	14986		S0053: 2	
HNHHE63	745100	5235	1 - 198	14987	Gly-1 to Arg-9, Ser-28 to Trp-33.	S0053: 2	
HNHHE80	774041	5236	35 - 205	14988		S0053: 2	
HNHHEF01	916546	5237	3 - 320	14989	Asp-1 to Asp-10, Gly-18 to Trp-23, Gly-25 to Ser-33.	S0053: 2	
HNHHEF33	698502	5238	1 - 261	14990	Gly-1 to Ala-12, Pro-14 to Gly-21.	S0053: 2	
HNHHEF51	698490	5239	43 - 240	14991	Ala-1 to Pro-25.	S0053: 3	
HNHHEF56	496204	5240	2 - 217	14992	Tyr-7 to Phe-24.	S0053: 2	
HNHHEF58	859946	5241	80 - 247	14993		S0053: 3	
HNHHEF63	745095	5242	68 - 373	14994	Pro-35 to Gly-43.	S0053: 1 and S0216: 1.	
HNHHEF79	775205	5243	59 - 184	14995		S0053: 3	
HNHHEF96	796402	5244	144 - 1	14996		S0053: 3	
HNHHG47	720361	5245	41 - 292	14997	Pro-25 to Pro-31.	S0053: 3	
HNHHG50	724411	5246	2 - 247	14998		S0053: 2	
HNHHG65	750266	5247	61 - 249	14999		S0053: 2	
HNHHH13	657251	5248	56 - 223	15000	Ala-1 to Cys-9, Pro-51 to Ser-56.	S0053: 4	
HNHHH42	713796	5249	28 - 225	15001		S0053: 2	
HNHHH57	734793	5250	134 - 313	15002		S0053: 2	
HNHHI10	964659	5251	3 - 188	15003		S0052: 1 and S0053: 1.	
HNHHI28	859941	5252	1 - 351	15004	Gly-1 to Gly-18,	S0053: 2	

							Asn-49 to Asn-72, Gly-86 to Gln-98.				
HNHHI34	706699	5253	37 - 171	15005			Arg-17 to Thr-24.		S0053: 2		
HNHHI36	708132	5254	213 - 440	15006			Glu-13 to Ser-20, Gln-42 to Thr-52.		S0140: 1 and S0053: 1.		
HNHHI65	750263	5255	171 - 386	15007			Ile-3 to Lys-9, Leu-26 to Cys-31, Cys-39 to Gly-47.		S0053: 2		
HNHHI72	510619	5256	72 - 689	15008			Thr-7 to Arg-18, Arg-42 to Leu-48, Arg-51 to Arg-59, Pro-61 to Ala-73.		S0052: 1 and S0053: 1.		
HNHHK06	935517	5257	192 - 431	15009			Glu-16 to Tyr-25, Gln-69 to Thr-76.		H0635: 1, H0063: 1 and S0053: 1.		
HNHHK39	937598	5258	142 - 300	15010			Arg-15 to Leu-23, Lys-30 to Gln-53.		S0053: 4		
HNHHK46	718081	5259	1 - 150	15011			Gly-1 to Thr-30.		S0053: 2 and S0216: 1.		
HNHHK62	741835	5260	1 - 228	15012			Pro-23 to Leu-30.		S0053: 2		
HNHHK74	765601	5261	193 - 336	15013					S0053: 2		
HNHHK84	781980	5262	226 - 363	15014					S0053: 2		
HNHHK93	792326	5263	370 - 561	15015			Leu-1 to Gln-14.		S0053: 2 and S0216: 1.		
HNHHL22	674617	5264	164 - 310	15016			Arg-12 to Leu-19.		S0053: 2		
HNHHL70	757201	5265	107 - 322	15017			Arg-9 to Phe-15.		S0053: 3		
HNHHL74	765598	5266	53 - 181	15018					S0053: 2		
HNHHL92	756587	5267	3 - 134	15019			His-1 to Tyr-7, Thr-11 to Ser-17, Leu-33 to Cys-39.		S0053: 1 and S0216: 1.		
HNHHM10	964656	5268	76 - 207	15020					S0053: 2		
HNHHM17	661964	5269	2 - 130	15021			Pro-12 to Cys-20, Ser-23 to Asn-31.		S0053: 2		
HNHHM25	678144	5270	76 - 285	15022					S0053: 2		
HNHHM28	575451	5271	271 - 149	15023					L0666: 2, L0717: 1, H0057: 1, L0659: 1, S0053: 1 and L0748: 1.		
HNHHM35	706667	5272	158 - 334	15024			Asn-9 to Cys-16, Pro-19 to Ser-31,		S0053: 2		

HNHHM37	708715	5273	20 - 160	15025	Asn-45 to Val-53.	S0053: 3	
HNHHM52	727166	5274	87 - 203	15026	Leu-17 to Leu-25, Asn-42 to Gly-47.	S0053: 2	
HNHHM55	694373	5275	69 - 377	15027	Val-17 to Ala-22, Pro-49 to Ser-55.	S0053: 4 and L0592: 1.	
HNHHM70	757202	5276	140 - 259	15028	Ser-17 to Gly-23.	S0053: 2	
HNHHM80	880776	5277	46 - 285	15029		S0053: 4	
HNHHN03	920129	5278	159 - 362	15030		S0053: 2 and S0428: 1.	
HNHHN07	953393	5279	109 - 285	15031		S0053: 2	
HNHHN11	964657	5280	3 - 254	15032		S0053: 3	
HNHHN19	668681	5281	71 - 268	15033	Gln-1 to Asp-7, Pro-13 to Pro-18, Ser-34 to Ser-43.	S0053: 3	
HNHHN31	698035	5282	1 - 117	15034	Pro-9 to Gly-23, Pro-27 to Thr-39.	S0053: 2	
HNHHN62	745700	5283	1 - 150	15035	Arg-24 to Ser-32, Pro-35 to Ser-42.	S0053: 2	
HNHHN93	751659	5284	203 - 358	15036	Asn-17 to Asn-28.	S0053: 6	
HNHHO08	953398	5285	214 - 330	15037	Ile-1 to Arg-10.	S0053: 3	
HNHHO15	424836	5286	2 - 169	15038	Arg-25 to Gly-32.	S0053: 2	
HNHHO49	722991	5287	101 - 280	15039	His-4 to Gly-9, Ser-13 to Arg-19, Thr-27 to Glu-32.	S0053: 2	
HNHHO66	727167	5288	77 - 259	15040		S0053: 4	
HNHHO79	774038	5289	1 - 159	15041		S0053: 2	
HNHHP02	920120	5290	2 - 142	15042		S0053: 2	
HNHHP04	935501	5291	26 - 241	15043		S0053: 5	
HNHHP16	661962	5292	91 - 357	15044		S0053: 2	
HNHHR04	935502	5293	13 - 129	15045		S0053: 4	
HNHHR46	720358	5294	137 - 346	15046	Arg-20 to Ala-26, Gly-28 to Thr-35, Ala-43 to Pro-55.	S0053: 4	
HNHHR61	741830	5295	75 - 230	15047	Pro-32 to Arg-38.	S0053: 2	
HNHHR93	775194	5296	65 - 235	15048		S0053: 3	

HNHHS46	956186	5297	514 - 684	15049	Leu-52 to Cys-57.	S0053: 2, S0114: 1, S0116: 1, H0580: 1, H0179: 1, H0271: 1, H0090: 1, H0264: 1, L0805: 1, L0527: 1 and L0367: 1.		
HNHHS74	765584	5298	124 - 420	15050	Arg-3 to Ser-11.	S0053: 3		
HNHHS76	788913	5299	188 - 313	15051	Thr-8 to Gly-16, Pro-19 to Asn-29, Gln-36 to Asn-42.	S0053: 3		
HNHHS79	775192	5300	18 - 131	15052		S0053: 2 and S0216: 1.		
HNHHT35	707342	5301	30 - 404	15053	Ser-8 to Gln-13.	S0053: 2		
HNHHT55	465438	5302	3 - 431	15054	Asn-6 to Thr-11, His-35 to Ala-41.	S0053: 2		
HNHHT70	783033	5303	2 - 193	15055	Ala-3 to Lys-17, Ser-41 to Gly-50.	S0053: 2		
HNHHU46	465395	5304	3 - 287	15056	Ser-1 to Glu-6, Glu-9 to Leu-14, Asn-39 to Asn-46, Pro-65 to His-71.	S0053: 2		
HNHHW01	859935	5305	55 - 420	15057	Asn-60 to Leu-66, Pro-70 to Val-93, Ile-101 to Leu-107.	S0053: 2		
HNHHW32	699255	5306	100 - 207	15058		S0053: 2		
HNHHW58	739288	5307	3 - 203	15059	Ala-30 to Gln-39, Gly-57 to Thr-67.	S0053: 2		
HNHHW61	742071	5308	1 - 159	15060		S0053: 2		
HNHHW73	765588	5309	103 - 201	15061		S0053: 2		
HNHIA02	920094	5310	2 - 496	15062	Pro-19 to Ala-25, Ala-53 to Pro-64, Arg-71 to Cys-77.	S0053: 2		
HNHIA16	661931	5311	1 - 237	15063	Gly-13 to Lys-20, Cys-32 to Tyr-49, Glu-60 to Thr-70.	S0053: 2		
HNHIA20	669685	5312	64 - 195	15064	Arg-20 to Leu-38.	S0053: 5		
HNHIA34	706675	5313	204 - 10	15065		S0053: 2		
HNHIA58	736046	5314	117 - 272	15066	Glu-1 to Gly-8.	S0053: 2		

HNHIA64	745861	5315	112 - 360	15067			S0053: 2		
HNHIA73	559344	5316	10 - 270	15068	Ser-71 to Leu-76.		AR054: 9, AR051: 8, AR050: 8 S0053: 2		
	888195	9595	11 - 298	19347	Ser-71 to Leu-76.				
HNHIA94	970720	5317	56 - 217	15069	Glu-35 to Gly-47.		S0053: 2		
HNHIA95	908419	5318	46 - 399	15070	Lys-8 to Pro-14, Asn-47 to Cys-52.		AR089: 7, AR061: 6 S0053: 4		
HNHIB22	967038	5319	2 - 169	15071	Glu-18 to Cys-24.		S0053: 4		
HNHIB56	734763	5320	1 - 207	15072	Gly-1 to Gln-8, Gly-21 to Pro-28.		S0053: 2		
HNHIB77	781214	5321	1 - 363	15073			S0053: 2 and S0052: 1.		
HNHIB94	793210	5322	14 - 238	15074	Ala-55 to Asp-69.		S0053: 3		
HNHIC39	705375	5323	271 - 423	15075	Arg-11 to Ser-17.		S0053: 2		
HNHIC46	842003	5324	243 - 434	15076	Trp-1 to Lys-10.		H0416: 1 and S0053: 1.		
HNHIC96	779876	5325	148 - 384	15077	Pro-41 to Trp-46.		S0053: 2		
HNHID29	690646	5326	37 - 243	15078	Pro-31 to Tyr-39.		S0053: 2		
HNHID53	727151	5327	155 - 409	15079	Pro-38 to Pro-43.		S0053: 2		
HNHID55	731761	5328	92 - 268	15080	Lys-19 to Tyr-25, Gln-48 to Glu-58.		S0053: 3		
HNHID79	774044	5329	3 - 371	15081	Gly-16 to Arg-22, Thr-53 to Ala-61.		S0053: 2		
HNHIE75	765585	5330	13 - 204	15082	Gln-22 to Gly-28.		S0053: 2		
HNHIE82	921945	5331	217 - 666	15083	Gly-1 to Ile-6, Pro-14 to Pro-19.		S0053: 3, L0365: 1 and S0052: 1.		
HNHIG01	916503	5332	2 - 244	15084	Arg-2 to Pro-9, Ser-11 to Lys-26, Ser-35 to Thr-50, Phe-74 to Asp-81.		S0053: 2		
HNHIG13	465404	5333	2 - 181	15085			S0053: 3	16p11.2	147781, 172471, 182381
HNHIG19	668657	5334	3 - 431	15086	Glu-2 to Gln-9, Ala-20 to Trp-27, Ser-44 to Ala-51, Pro-64 to Ser-69, Ala-76 to Pro-81.		S0053: 2		

HNHIG37	708713	5335	31 - 285	15087	Asn-39 to Arg-44.	S0053: 3	
HNHIG68	753025	5336	284 - 412	15088		S0053: 2	
HNHIG71	465407	5337	36 - 371	15089	Pro-78 to Arg-92.	S0053: 2	
HNHIIH23	675262	5338	2 - 244	15090	Asn-10 to Cys-17, Pro-19 to Arg-27, Glu-39 to Pro-45.	S0053: 3	
HNHIIH27	681727	5339	122 - 331	15091	His-37 to Lys-43.	S0053: 2	
HNHIIH29	689891	5340	16 - 195	15092	Glu-11 to His-22, Pro-31 to Gln-38.	S0053: 2	
HNHIIH46	720333	5341	128 - 415	15093		S0053: 2	
HNHIIH58	739290	5342	70 - 222	15094	Arg-8 to Lys-16, Pro-40 to Arg-51.	S0053: 2	
HNHIIH66	684531	5343	34 - 174	15095		H0271: 1 and S0053: 1.	
HNHIIH71	760371	5344	179 - 325	15096	Trp-24 to Ser-32.	S0053: 2	
HNHIIH73	765591	5345	3 - 236	15097	His-1 to Trp-10.	S0053: 2	
HNHIIH82	779874	5346	84 - 257	15098		S0053: 3	
HNHIIH96	734114	5347	153 - 422	15099		S0053: 1 and S0216: 1.	
HNHIIH84	775407	5348	100 - 246	15100		S0053: 2	
HNHIS14	967087	5349	1 - 141	15101		S0053: 3	
HNHIV95	795877	5350	69 - 290	15102		S0053: 1 and S0216: 1.	
HNHIW13	657249	5351	77 - 403	15103	Thr-7 to Arg-14, Pro-33 to Ser-38, Gly-45 to Lys-75.	S0053: 2	
HNHIW35	707339	5352	147 - 299	15104	Asn-3 to Trp-14, Gly-31 to Lys-39, Val-46 to Asp-51.	S0053: 2	
HNHKLH15	859926	5353	154 - 417	15105		S0216: 2	
HNHKLH60	739885	5354	302 - 93	15106	Ser-17 to Val-31.	S0216: 2	
HNHKLJ24	859923	5355	223 - 372	15107		S0216: 2	
HNHKL72	761427	5356	115 - 225	15108		S0216: 2	
HNHKL88	786555	5357	1 - 177	15109	Gly-6 to Leu-13.	S0216: 2	
HNHKN73	762011	5358	51 - 443	15110	Asp-15 to Ser-20, Arg-40 to Gly-46.	AR061: 7, AR089: 4 S0216: 2	
HNHKKP30	793658	5359	1 - 138	15111		S0216: 2 and S0428: 1.	
HNHKKP48	721149	5360	167 - 358	15112	Gln-51 to Asp-62.	S0216: 2	

HNHKKP72	761432	5361	526 - 726	15113		S0216: 2	
HNHKS69	750487	5362	92 - 241	15114	Ser-8 to Ala-15.	S0053: 1 and S0216: 1.	
HNHKS75	766926	5363	79 - 324	15115	Thr-16 to Ala-24, Asn-33 to Asn-38.	S0216: 2	
HNHKT06	934643	5364	30 - 137	15116	Ser-6 to Asn-18.	S0216: 2	
HNHKT75	766924	5365	3 - 119	15117		S0216: 2	
HNHKKV67	751205	5366	205 - 375	15118	Lys-26 to Met-31.	S0216: 2	
HNHKKW47	786020	5367	14 - 193	15119	Glu-36 to Ser-45.	H0402: 1 and S0216: 1.	
HNHKKW76	767917	5368	42 - 290	15120	Pro-43 to Gln-50.	S0216: 1 and H0445: 1.	
HNHKKW81	761429	5369	247 - 504	15121	Gln-1 to Glu-6, Arg-22 to Gly-29.	S0216: 2	
HNHKKW83	780650	5370	1 - 531	15122	Gln-32 to His-37, Ala-63 to His-69, Pro-94 to Ala-110, Ser-136 to Gln-145.	S0216: 2	
HNHKKX10	963575	5371	251 - 409	15123		S0216: 3	
HNHKKX38	796804	5372	334 - 477	15124	Ser-1 to Lys-7, Glu-15 to Val-23.	S0002: 1 and S0216: 1.	
HNHKKX47	789625	5373	163 - 387	15125		S0428: 1 and S0216: 1.	
HNHKKX77	771530	5374	78 - 377	15126		S0216: 2	
HNHKKZ11	966164	5375	85 - 288	15127	Asn-35 to Leu-41, Tyr-45 to Phe-50, Thr-58 to Thr-67.	S0216: 2	
HNHILA08	958422	5376	107 - 340	15128	Ser-15 to Leu-21.	S0428: 1 and S0216: 1.	
HNHILA16	784264	5377	557 - 814	15129		L0764: 1, S0216: 1 and H0522: 1.	
HNHILA55	754480	5378	1 - 420	15130	Ala-63 to Cys-71, Pro-80 to Gly-89, Pro-102 to Gly-116.	S0216: 2	
HNHILA71	761430	5379	388 - 585	15131	Glu-10 to Glu-21, Ser-39 to Ala-44, Gly-48 to Met-53.	S0216: 2	
HNHILA89	786461	5380	2 - 310	15132	Arg-16 to Gly-23, Trp-60 to Trp-65.	H0254: 1 and S0216: 1.	
HNHILA90	970724	5381	241 - 609	15133	Gln-33 to Gly-42, Ala-59 to Arg-72.	S0052: 1, S0053: 1 and S0216: 1.	



HNHLB08	958416	5382	92 - 268	15134	Gly-95 to Ser-104. Gln-24 to Pro-30, Ser-52 to Gly-59.	S0216: 2	
HNHLC69	754466	5383	84 - 356	15135	Ser-58 to Ala-66.	S0216: 2	
HNHLD08	859857	5384	2 - 319	15136	Leu-38 to Gly-46, Leu-49 to Gln-56, Pro-64 to Ser-70.	S0216: 2	
HNHLD13	805983	5385	208 - 378	15137	Gly-1 to Ser-6.	S0216: 2	
HNHLD37	859859	5386	123 - 353	15138	Val-7 to Ser-15, Pro-29 to Ser-35.	S0053: 1 and S0216: 1.	
HNHLD81	779345	5387	149 - 301	15139	Lys-3 to His-8.	S0216: 2	
HNHLE72	966149	5388	130 - 246	15140		S0216: 2	
HNHLE25	859856	5389	1 - 258	15141		S0053: 1 and S0216: 1.	
HNHLEF33	908449	5390	1 - 255	15142	Phe-5 to Gly-16, Thr-18 to Met-25, Lys-55 to Ser-63.	S0053: 1 and S0216: 1.	
HNHLEF58	859858	5391	3 - 233	15143	Thr-2 to Thr-12, Val-21 to Leu-36, Gln-49 to Ser-56.	S0216: 2	
HNHLEP56	883321	5392	100 - 213	15144		S0053: 1 and S0216: 1.	
HNHLEP69	754440	5393	73 - 180	15145		S0053: 1 and S0216: 1.	
HNHLEP77	967239	5394	176 - 466	15146		S0052: 1 and S0216: 1.	
HNHLEQ36	760460	5395	161 - 454	15147		S0053: 1 and S0216: 1.	
HNHLEQ61	795942	5396	119 - 289	15148		S0052: 1 and S0216: 1.	
HNHLEQ80	775621	5397	17 - 253	15149		H0179: 2 and S0216: 1.	
HNHLE73	761855	5398	3 - 179	15150	Gly-53 to Cys-59.	S0216: 2	
HNHLE91	789786	5399	160 - 276	15151		S0216: 2	
HNHLE04	927077	5400	1 - 168	15152	Thr-18 to Gly-24, Asn-39 to Gly-49.	S0216: 2	
HNHLES53	827329	5401	45 - 176	15153	Gly-28 to Val-34.	S0216: 2	
HNHLE749	784983	5402	112 - 5	15154	Lys-1 to Gly-14.	S0216: 2	
HNHLE784	782319	5403	99 - 230	15155		S0216: 2	
HNHLEW93	791782	5404	227 - 448	15156		S0002: 1 and S0216: 1.	
HNHLEX82	779298	5405	2 - 151	15157	Gln-37 to Lys-50.	S0216: 2	
HNHLEMC78	772969	5406	200 - 319	15158		S0216: 2	

HNHMD85	876673	5407	7 - 159	15159	Tyr-6 to Gln-28.	S0053: 1 and S0216: 1.	
HNHMD25	784479	5408	199 - 597	15160	Pro-38 to Leu-47.	L0747: 2, S0052: 1 and S0216: 1.	
HNHMQ93	791798	5409	32 - 145	15161	Leu-17 to Asp-25.	S0216: 2	
HNHMR04	927056	5410	100 - 420	15162		S0053: 1 and S0216: 1.	
HNHMR43	937561	5411	216 - 362	15163		S0053: 1 and S0216: 1.	
HNHMR73	967614	5412	240 - 428	15164	Lys-7 to Ser-20, Ser-32 to Ser-37.	S0114: 1 and S0216: 1.	
HNHMS77	916609	5413	1 - 144	15165		S0053: 1 and S0216: 1.	
HNHMS93	791807	5414	3 - 167	15166	Arg-21 to Trp-28, Thr-30 to Gly-36.	H0421: 1 and S0216: 1.	
HNHMT53	925689	5415	205 - 339	15167		S0216: 2	
HNHMT54	790765	5416	132 - 263	15168	Phe-1 to Ser-12, Thr-18 to Thr-27.	S0428: 1 and S0216: 1.	
HNHMT90	937564	5417	123 - 230	15169		S0216: 2	
HNHMT91	789785	5418	2 - 130	15170	Thr-23 to Gln-28.	H0265: 1 and S0216: 1.	
HNHMTW83	780558	5419	30 - 257	15171	Arg-3 to Asn-10, Lys-27 to Leu-32, Met-35 to Ile-41, Pro-47 to Asn-54.	S0053: 1 and S0216: 1.	
HNHMX45	953411	5420	2 - 379	15172		H0402: 1 and S0216: 1.	
HNHMY43	859841	5421	1 - 225	15173	Pro-19 to Gly-27.	S0216: 2	
HNHMY45	958409	5422	24 - 239	15174	Glu-25 to Cys-33.	S0216: 2	
HNHMY59	883324	5423	113 - 400	15175		S0216: 2	
HNHMY71	761436	5424	3 - 236	15176	Pro-31 to Gly-36.	S0216: 2	
HNHMYZ07	952290	5425	115 - 369	15177	Gly-2 to Cys-10.	S0216: 2, L0361: 2 and L0742: 1.	
HNHMYZ59	761661	5426	165 - 278	15178		S0216: 1 and H0445: 1.	
HNHMYZ86	784999	5427	1 - 93	15179	Asn-7 to Glu-17, Ser-24 to Lys-31.	S0216: 2	
HNHMYZ89	786457	5428	146 - 313	15180		S0216: 2	
HNHNA02	918720	5429	73 - 228	15181	Ala-22 to Lys-30.	S0053: 1 and S0216: 1.	
HNHNA69	754452	5430	11 - 160	15182		S0216: 2	
HNHNB77	771523	5431	1 - 243	15183	Ser-31 to Lys-36, Ser-76 to Ile-81.	S0053: 1 and S0216: 1.	

HNHNC82	779321	5432	146 - 310	15184			S0216: 2	
HNHND80	775612	5433	234 - 431	15185			S0053: 1 and S0216: 1.	
HNHNE11	966146	5434	3 - 95	15186			S0216: 2	
HNHNE59	771529	5435	190 - 351	15187			S0216: 3	
HNHNE83	780628	5436	2 - 346	15188	Asp-1 to Arg-6, Gln-53 to Ser-60, Ile-66 to Lys-72, Glu-76 to Lys-85, Gly-91 to Ser-99.		H0271: 3, H0250: 2, H0635: 2, S0216: 2, H0254: 1, H0638: 1, H0069: 1, H0416: 1, H0090: 1, L0761: 1, L0800: 1, L0776: 1, L0789: 1 and S0052: 1.	
HNHNG73	761849	5437	226 - 456	15189			S0052: 1 and S0216: 1.	
HNHNI10	963571	5438	1 - 225	15190			S0116: 1 and S0216: 1.	
HNHNI14	923079	5439	44 - 178	15191			S0216: 2	
HNHNJ08	859837	5440	3 - 242	15192	Thr-23 to Thr-28, His-34 to Met-39, Val-69 to Arg-76.		S0053: 1 and S0216: 1.	
HNHNK71	775635	5441	3 - 179	15193	Met-4 to Gly-9, Ser-12 to Leu-20.		S0216: 2	
HNHNL70	756633	5442	147 - 341	15194			S0216: 2	
HNHNN56	859834	5443	144 - 371	15195	Pro-38 to Gln-44.		L0368: 1, S0053: 1 and S0216: 1.	
HNHNO84	782328	5444	140 - 253	15196			S0216: 1 and H0445: 1.	
HNHNP80	775631	5445	54 - 185	15197			S0053: 1 and S0216: 1.	
HNHNP86	784788	5446	122 - 334	15198			S0216: 2	
HNHNU23	968911	5447	179 - 436	15199	Met-1 to Ala-12.		S0216: 2 and L0748: 1.	
HNHNU27	920254	5448	272 - 424	15200	Tyr-9 to Arg-14, Glu-22 to Pro-34.		H0402: 1 and S0216: 1.	
HNHNV52	859831	5449	82 - 213	15201	Arg-12 to Tyr-17.		S0216: 2	
HNHNW64	859832	5450	1 - 222	15202	Lys-14 to Pro-19.		S0216: 2	
HNHNX04	927027	5451	1 - 168	15203			S0216: 2	
HNHNX88	959011	5452	2 - 157	15204			S0052: 1, S0428: 1, S0216: 1 and H0444: 1.	
HNHOA03	923052	5453	122 - 457	15205			S0052: 1 and S0216: 1.	
HNHOC03	922892	5454	164 - 280	15206			H0551: 1 and S0216: 1.	
HNHOD01	915341	5455	28 - 219	15207	Arg-1 to Tyr-6,		S0052: 1 and S0216: 1.	

HNHOD62	852995	5456	143 - 319	15208	Leu-27 to Leu-41.	H0589: 1, S0052: 1 and S0216: 1.		
HNHOE53	767329	5457	285 - 422	15209		S0053: 1 and S0216: 1.		
HNHOF03	922028	5458	3 - 197	15210	Ser-10 to Ser-15, Glu-44 to Phe-65.	T0041: 1, S0428: 1 and S0216: 1.		
HNHOF07	952291	5459	90 - 326	15211	Lys-1 to Thr-18, Leu-28 to Arg-34, His-46 to Thr-59, Pro-62 to Gln-69.	T0041: 1, S0216: 1 and H0576: 1.		
HNHOF92	790934	5460	158 - 358	15212	Gly-19 to Lys-29.	H0457: 1 and S0216: 1.		
HNHOG84	782316	5461	331 - 543	15213	Lys-28 to Cys-37, Cys-41 to Pro-48, Leu-61 to Thr-69.	S0216: 2		
HNHOG86	785004	5462	128 - 394	15214	Pro-1 to Ala-6, Pro-26 to Gly-31, Arg-50 to Leu-56, Ser-69 to Gly-76, Ala-80 to Glu-89.	S0216: 2		
HNHOH10	963562	5463	298 - 558	15215	Tyr-28 to Ala-37.	S0216: 2		
HNHOJ03	923072	5464	464 - 712	15216	Cys-15 to Leu-24.	S0216: 2 and L0749: 1.		
HNHOM92	792328	5465	179 - 310	15217	Phe-12 to Arg-20.	H0402: 1 and S0216: 1.		
HNHOO16	959616	5466	549 - 845	15218		H0423: 2, H0486: 1, S0216: 1 and L0753: 1.		
HNHOO25	859826	5467	229 - 408	15219	Leu-12 to Asp-17, Lys-23 to Gln-29.	S0053: 1 and S0216: 1.		
HNHOO74	915462	5468	24 - 467	15220	Thr-13 to Arg-22, Arg-78 to Pro-83.	H0254: 1, H0264: 1 and S0216: 1.		
HNHOO87	787562	5469	72 - 260	15221	Glu-5 to Pro-11.	S0216: 2		
HNHOP10	963539	5470	298 - 477	15222	Ala-1 to Trp-7, Lys-21 to Ala-28.	S0053: 1 and S0216: 1.		
HNHOQ76	767877	5471	3 - 341	15223	Gly-1 to Trp-12, Lys-14 to Leu-19, Lys-52 to Ser-59.	S0216: 2		
HNHOS70	756593	5472	3 - 323	15224	Met-19 to Gly-28, Gly-33 to Ser-51.	H0402: 1 and S0216: 1.		

							Asn-56 to Gly-63, Asp-83 to Tyr-88.				
HNHOS75	766736	5473		246 - 377	15225				S0216: 2		
HNHOT10	963631	5474		310 - 107	15226				S0216: 2		
HNHOT11	923065	5475		258 - 482	15227				S0216: 2		
HNHOT95	795331	5476		100 - 2	15228				S0216: 2		
HNHOU20	773797	5477		28 - 138	15229		Ala-12 to Ser-18, Phe-31 to His-37.		S0053: 1 and S0216: 1.		
HNHOU68	806090	5478		2 - 151	15230				S0216: 2		
HNHOU94	793514	5479		1 - 282	15231		Gly-24 to Ser-31.		S0216: 2		
HNHOU99	854882	5480		367 - 705	15232		Gly-1 to Ser-6, Pro-41 to Gly-48, Ser-79 to Arg-92, Pro-104 to Asn-112.		S0216: 2 and L0589: 1.		
HNHOU10	963545	5481		2 - 307	15233		Pro-3 to Ser-15, Gly-57 to Gly-63, Ser-89 to His-99.		S0216: 3		
HNHOU31	859820	5482		33 - 491	15234				S0216: 2		
HNHOU89	786411	5483		30 - 254	15235		Ser-38 to His-57.		S0216: 2		
HNHOU04	923013	5484		68 - 298	15236		Lys-1 to Pro-8, Leu-11 to Phe-20.		S0216: 2		
HNHOU90	787488	5485		106 - 657	15237		Ser-27 to His-32, Pro-36 to Gly-41, Gly-49 to His-55, Trp-84 to Lys-96, Ser-118 to Gln-130, Pro-144 to Gly-157.		S0053: 1 and S0216: 1.		
HNHPC08	952246	5486		28 - 198	15238		Arg-21 to Val-38, Ala-42 to Leu-47.		S0216: 2		
HNHPC36	859819	5487		41 - 259	15239				S0216: 2		
HNHPC72	772970	5488		38 - 340	15240		Arg-41 to Val-47, Ala-80 to Gln-89.		S0216: 2		
HNHPD04	974103	5489		59 - 325	15241		Gly-1 to Val-8, Phe-12 to Arg-30, Arg-43 to His-58, Gln-60 to Val-66.		S0053: 2 and S0216: 1.		

HNHPD07	952244	5490	174 - 389	15242	Leu-83 to Glu-88.				
HNHPD13	859815	5491	2 - 322	15243	Gln-23 to Lys-33.			S0216: 2	
					His-46 to Cys-51, Pro-61 to Leu-67, Thr-76 to Ser-81, Pro-83 to Cys-89.			S0216: 2	
HNHPE86	784919	5492	3 - 311	15244				S0216: 2	
HNHPG61	784432	5493	27 - 458	15245	Ala-1 to Gly-13, Gln-48 to Ser-60, His-80 to Ser-85.			S0052: 1 and S0216: 1.	
HNHPG66	859812	5494	299 - 484.	15246	Cys-18 to His-23.			S0428: 1 and S0216: 1.	
HNHPG85	783821	5495	185 - 367	15247	Ile-33 to Leu-38.			S0053: 1 and S0216: 1.	
HNHPH29	934456	5496	233 - 451	15248	Ser-33 to Lys-38, Arg-45 to Thr-51.			S0216: 2	
HOIAE91	935322	5497	101 - 520	15249	Ser-30 to Phe-37, Ser-39 to Leu-45, Asp-53 to Thr-60, Gln-74 to Gly-79, Gly-86 to Lys-100, Gln-106 to Ser-124.			H0250: 3, S3016: 1, H0402: 1, H0625: 1, L0509: 1, L0791: 1, S0292: 1, H0521: 1, H0436: 1 and S3020: 1.	
HPSAA31	739041	5498	29 - 280	15250	Tyr-1 to Lys-9, Glu-29 to Ser-36, Ser-52 to Asn-60.			H0305: 2, H0589: 1 and H0074: 1.	
HPSAA50	723558	5499	70 - 297	15251	Gln-1 to Lys-6, Gly-18 to Asp-24.			H0074: 2	
HPSAA63	536776	5500	87 - 182	15252				H0074: 3	
HPSAB25	677474	5501	275 - 192	15253				H0074: 2	
HSATA03	925082	5502	49 - 174	15254				S0114: 1 and H0264: 1.	
HSATA86	683251	5503	78 - 227	15255	Ser-1 to Gln-11, Ile-36 to Glu-50.			S0114: 2 and L0748: 2.	
HSATE44	666207	5504	129 - 338	15256	His-4 to Gln-9, Gly-32 to Ser-42.			S0114: 1 and H0318: 1.	
HSATE89	531280	5505	148 - 375	15257	Leu-5 to Lys-12, Lys-27 to Arg-32.			S0114: 2	
HSATF05	907593	5506	15 - 200	15258	Glu-1 to Ser-7, Thr-17 to Ser-24.			S0114: 1, H0306: 1 and L0761: 1.	

HSATF79	781718	5507	2 - 205	15259			S0114: 1 and H0521: 1.		
HSATJ56	716434	5508	240 - 404	15260			S0114: 1 and H0445: 1.		
HSATJ84	781405	5509	196 - 315	15261			S0114: 2 and L0748: 1.		
HSATM25	688006	5510	173 - 418	15262			S0114: 1 and H0436: 1.		
HSATM79	677717	5511	3 - 437	15263		Pro-39 to Lys-54.	S0114: 1 and H0591: 1.		
HSATQ28	866951	5512	3 - 164	15264			AR089: 120, AR061: 12 S0114: 2, H0422: 2 and L0748: 1.		
HSATQ76	765376	5513	319 - 582	15265		Val-6 to Leu-23.	S0114: 1, H0581: 1 and L0756: 1.		
HSATR17	888871	5514	255 - 389	15266			AR051: 5, AR054: 3, AR050: 0 S0114: 1 and H0272: 1.		
HSATR27	713143	5515	1 - 180	15267		Arg-7 to Gly-12.	S0114: 3		
HSATR32	699586	5516	2 - 256	15268			S0114: 2 and H0581: 1.		
HSATR76	659994	5517	120 - 305	15269			H0445: 2, S0114: 1 and L0745: 1.		
HSATS23	524369	5518	19 - 123	15270			S0114: 2		
HSATS29	689823	5519	116 - 214	15271			S0114: 1 and H0444: 1.		
HSATS56	732640	5520	63 - 242	15272		Thr-38 to Ser-47.	S0114: 1 and H0576: 1.		
HSATT96	796565	5521	252 - 422	15273		Tyr-14 to Ser-25.	S0114: 1 and H0318: 1.		
HSATV34	732184	5522	459 - 325	15274			S0114: 1 and H0423: 1.		
HSATW22	531171	5523	138 - 266	15275			S0114: 2, L0758: 2, L0041: 5 1, L0659: 1 and L0747: 1.		
HSATX46	866959	5524	2 - 250	15276		Glu-12 to His-20.	S0114: 2 and S0426: 1.		
HSAUA88	757624	5525	86 - 313	15277		Gly-9 to Asn-15, Glu-29 to Phe-41, Trp-65 to Cys-70.	S0114: 1 and H0422: 1.		
HSAUB19	954055	5526	112 - 204	15278		Arg-11 to Ser-17, Ser-24 to Cys-29.	S0114: 2		
HSAUB90	733714	5527	3 - 131	15279			H0265: 1 and S0114: 1.		
HSAUD05	932502	5528	1 - 183	15280		Ser-6 to Glu-11.	S0114: 2 and H0264: 1.		
HSAUD45	531170	5529	1 - 237	15281			S0114: 1 and S0053: 1.		
HSAUE25	571385	5530	64 - 177	15282		Leu-26 to Cys-33.	S0114: 1 and S0134: 1.		
HSAUB40	866933	5531	124 - 405	15283			S0114: 2		

HSAUF18	527038	5532	17 - 328	15284	Leu-16 to Pro-22.	S0114: 1, H0179: 1, S0052: 1 and L0751: 1.		
HSAUG15	953628	5533	690 - 836	15285	Lys-18 to Ile-23.	L0766: 3, S0114: 1, H0063: 1, L0761: 1, L0805: 1, L0776: 1, L0527: 1 and L0744: 1.		
HSAUH65	953873	5534	177 - 278	15286		S0114: 2		
HSAUH69	870437	5535	528 - 758	15287	Leu-1 to Cys-6.	L0766: 4, L0740: 4, L0777: 2, S0114: 1 and S0134: 1.		
HSAUJ05	856886	5536	156 - 368	15288		S0114: 1 and H0254: 1.		
HSAUJ26	950714	5537	110 - 211	15289		S0114: 1 and H0551: 1.		
HSAUL67	866919	5538	204 - 380	15290		S0114: 1 and H0254: 1.		
HSAUQ94	526936	5539	82 - 192	15291	His-6 to Ser-12, Asn-24 to Asn-32.	S0114: 3		
HSAUT77	557848	5540	2 - 163	15292	Arg-31 to Gly-37.	S0114: 2		
HSAUW10	967600	5541	121 - 360	15293	Leu-6 to Gly-12, Pro-14 to Ser-20, Thr-38 to Ile-46.	S0114: 2		
HSAUW71	537544	5542	77 - 274	15294	Ser-1 to Thr-6.	S0114: 2		
HSAUZ38	744899	5543	215 - 463	15295	Gly-58 to Gly-66.	S0114: 3, H0445: 3, L0002: 1 and L0803: 1.		
HSAUZ57	685253	5544	388 - 579	15296		S0114: 2, H0402: 1 and L0748: 1.		
HSAVA44	866900	5545	1 - 210	15297	His-22 to Thr-28.	S0114: 2		
HSAVA61	742073	5546	1 - 153	15298	Phe-8 to His-16.	S0114: 1, H0087: 1 and L0731: 1.	2	
HSAVB05	932496	5547	41 - 157	15299		S0114: 1 and S0116: 1.		
HSAVB19	866899	5548	5 - 322	15300	Arg-1 to Pro-13, Ala-40 to Gly-49.	S0114: 2		
HSAVC41	584978	5549	1 - 132	15301	Thr-1 to Asp-10.	S0114: 2		
HSAVC76	967286	5550	173 - 325	15302		S0114: 1 and S0134: 1.		
HSAVF35	932462	5551	84 - 257	15303	Asp-25 to Phe-35.	H0265: 1 and S0114: 1.		
HSAVG81	959949	5552	335 - 547	15304	Leu-41 to Phe-47, Val-51 to Arg-59.	S0114: 2, H0439: 1, L0794: 1, L0777: 1 and L0599: 1.		
HSAVH17	417452	5553	37 - 186	15305	Cys-34 to Thr-39.	S0114: 2		
HSAVH95	574243	5554	142 - 273	15306		S0114: 1, H0318: 1 and		



HSAVI44	715837	5555	82 - 225	15307	Lys-1 to Ser-6.	L0749: 1.	
HSAVI46	717837	5556	245 - 460	15308	Tyr-11 to Trp-18, Arg-41 to Val-53.	S0114: 1 and H0445: 1. S0114: 1 and S0002: 1.	
HSAVI59	579060	5557	110 - 376	15309		S0114: 1 and H0063: 1.	
HSAVI77	739521	5558	1 - 177	15310		S0114: 2	
HSAVL43	714418	5559	174 - 503	15311	Phe-34 to Cys-39, Pro-77 to Tyr-82, Arg-105 to Arg-110.	L0748: 6, L0749: 2, S0114: 1 and S0426: 1.	
HSAVN07	935797	5560	81 - 233	15312	Lys-8 to Arg-15, Thr-21 to Lys-36.	S0114: 1, H0402: 1 and L0521: 1.	
HSAVN17	920412	5561	221 - 430	15313	Ser-11 to Cys-21.	S0114: 1 and H0445: 1.	
HSAVO37	574709	5562	2 - 265	15314	Gly-1 to Ser-18.	H0556: 1, S0114: 1 and H0090: 1.	
HSAVO53	531111	5563	115 - 249	15315		S0114: 2	
HSAVO82	531398	5564	131 - 60	15316		S0114: 1 and H0179: 1.	
HSAVP10	964950	5565	240 - 416	15317		S0114: 2	
HSAVQ46	574784	5566	3 - 254	15318	Ala-1 to Arg-18.	S0114: 1, H0271: 1 and L0657: 1.	
HSAVQ56	522431	5567	75 - 347	15319		S0114: 2	
HSAVR06	936049	5568	11 - 91	15320		S0114: 2	
HSAVR74	827090	5569	2 - 112	15321	Lys-22 to Lys-27.	S0114: 2	
HSAVS17	574269	5570	3 - 71	15322	Gln-2 to Thr-13.	S0114: 2	
HSAVS46	526756	5571	1 - 249	15323		S0114: 2	
HSAVS76	866888	5572	2 - 94	15324	Gln-7 to Ser-19.	S0114: 2	
HSAVT18	920565	5573	107 - 328	15325		S0114: 1 and H0305: 1.	
HSAVT24	577549	5574	175 - 474	15326		S0114: 3, L0776: 1, H0521: 1 and H0423: 1.	
HSAVT95	925582	5575	38 - 232	15327	Glu-39 to Lys-47.	S0114: 1, H0306: 1 and L0527: 1.	
HSAVU11	967490	5576	17 - 142	15328		S0114: 2	
HSAVU14	920695	5577	91 - 378	15329		S0114: 2	
HSAVW44	574267	5578	333 - 455	15330		S0114: 2	
HSAVX96	744614	5579	49 - 282	15331	Gln-4 to Lys-16.	S0114: 1 and H0580: 1.	
HSAVY34	574287	5580	3 - 221	15332	Arg-34 to Glu-40.	S0114: 3 and S0134: 1.	

HSAVY58	526958	5581	36 - 176	15333			S0114: 2 and H0264: 1.		
HSAVZ35	842039	5582	239 - 364	15334			H0159: 1 and S0114: 1.		
HSAVZ65	574192	5583	158 - 328	15335			S0114: 2		
HSAWA25	577281	5584	16 - 177	15336		Asn-14 to His-21.	H0445: 2, S0114: 1 and L0766: 1.		
HSAWC89	785988	5585	116 - 913	15337		Asn-18 to Leu-23, Tyr-41 to Gly-46, Asp-101 to Asp-110.	H0265: 1, S0114: 1, H0421: 1 and L0596: 1.		
HSAWG75	574223	5586	58 - 159	15338			S0114: 1 and H0318: 1.		
HSAWH47	720335	5587	328 - 522	15339		Leu-1 to Cys-7, Phe-55 to Trp-61.	S0114: 1, H0638: 1 and L0748: 1.		
HSAWI18	666842	5588	150 - 335	15340		Tyr-35 to Ser-41.	S0114: 1, H0444: 1 and H0543: 1.		
HSAWI50	742713	5589	2 - 226	15341		Val-7 to Val-15.	S0114: 1 and H0607: 1.		
HSAWJ36	866874	5590	478 - 837	15342		Thr-1 to Lys-12.	S0114: 2, L0743: 2, L0638: 1, L0800: 1, L0659: 1, L0758: 1 and L0759: 1.		
HSAWJ93	751429	5591	2 - 148	15343			S0114: 1 and H0444: 1.		
HSAWL80	792893	5592	187 - 324	15344		Val-10 to His-15, Val-35 to Leu-40.	S0114: 2		
HSAWN67	883825	5593	189 - 665	15345			S0114: 1 and H0436: 1.		
HSAWT91	522474	5594	104 - 178	15346			S0114: 1 and S0053: 1.		
HSAWU96	577267	5595	147 - 257	15347			S0114: 1, H0444: 1 and H0445: 1.		
HSAWV18	666841	5596	5 - 103	15348			S0114: 1, H0305: 1 and L0766: 1.		
HSAWY11	967489	5597	237 - 365	15349			S0114: 1 and H0445: 1.		
HSAXB47	720536	5598	3 - 578	15350		Gly-15 to Phe-21, Asp-79 to Glu-93, Gly-103 to Phe-111.	S0114: 1, S0426: 1 and H0521: 1.		
HSAXB84	574172	5599	117 - 416	15351		Asp-8 to Cys-20, Arg-41 to Asp-58.	S0114: 2		
HSAXB95	796006	5600	2 - 328	15352		Pro-4 to Pro-11.	S0114: 1 and S0216: 1.		
HSAXC60	579044	5601	122 - 286	15353			S0114: 1, S0134: 1 and H0457: 1.		
HSAXD03	924900	5602	162 - 254	15354			S0114: 2		

HSAXD08	959939	5603	155 - 283	15355	Pro-11 to Thr-20.	S0114: 1 and H0341: 1.		
HSAXD18	575543	5604	97 - 2	15356		S0114: 4		
HSAXD73	574274	5605	178 - 396	15357	Lys-12 to Leu-17, Glu-53 to Cys-61.	S0114: 2 and L0754: 1.		
HSAXD75	526777	5606	177 - 332	15358	Gly-29 to Asp-36.	S0114: 2		
HSAXF03	924899	5607	34 - 222	15359		S0114: 2 and L0766: 1.		
HSAXG18	574165	5608	190 - 297	15360		S0114: 1 and H0090: 1.		
HSAXG30	574280	5609	3 - 236	15361	Ser-40 to Ser-47.	S0114: 2		
HSAXI07	953871	5610	16 - 105	15362		S0114: 2	7q31.1-q31.2	126650, 126650, 150240, 180105, 222800, 246900, 602421, 602421, 602421
HSAXI47	574159	5611	340 - 456	15363		S0114: 1 and H0063: 1.		
HSAXI62	531114	5612	59 - 211	15364	His-37 to Pro-51.	S0114: 2		
HSAXJ25	964753	5613	38 - 184	15365	Lys-26 to Ser-32.	S0114: 1, L0748: 1 and H0445: 1.		
HSAXL83	866840	5614	1 - 138	15366	Thr-30 to Ala-36.	S0114: 2		
HSAXM33	866837	5615	1 - 291	15367	Ile-18 to Pro-25, Val-33 to Gln-42, Phe-46 to Val-51, Pro-82 to Asp-97.	S0114: 2		
HSAXM34	526939	5616	3 - 254	15368	Gly-14 to His-26.	S0114: 2 and S0116: 1.		
HSAXM44	574173	5617	1 - 150	15369		S0114: 2		
HSAXM68	754061	5618	167 - 322	15370		S0114: 2		
HSAXM91	784470	5619	120 - 221	15371	Asp-27 to Ser-34.	S0114: 2		
HSAXN51	574286	5620	188 - 445	15372	Pro-34 to Lys-47.	S0114: 2, S0216: 2 and S0134: 1.		
HSAXO52	726053	5621	419 - 547	15373	Gln-32 to Asn-37.	S0114: 1, L0586: 1 and H0423: 1.		
HSAXO53	727491	5622	2 - 130	15374	Ile-1 to Leu-11, Glu-31 to Thr-37.	H0186: 1 and S0114: 1.		
HSAXO65	713784	5623	45 - 248	15375		S0114: 2		
HSAXP51	725673	5624	194 - 319	15376	Thr-3 to Arg-12, Arg-29 to Glu-35.	S0114: 2 and H0581: 1.		
HSAXR08	959441	5625	192 - 521	15377	Leu-3 to Ser-9.	L0748: 2, S0114: 1, H0581:		

HSAXR83	866831	5626	33 - 362	15378	Gly-105 to Ala-110.	1 and L0367: 1.	
HSAXS44	715896	5627	2 - 148	15379	Pro-16 to Lys-21.	S0114: 1 and H0305: 1.	
HSAYA60	650857	5628	1 - 342	15380	Lys-30 to Phe-41.	S0114: 2	
HSAYA80	751139	5629	145 - 522	15381	Gly-1 to Ala-6.	S0114: 2	
HSAYA95	856883	5630	145 - 339	15382	Ala-1 to Gly-8, Ala-19 to Pro-36.	S0114: 2	
HSAYC17	663910	5631	170 - 376	15383	Glu-44 to Ser-55, Thr-63 to Lys-68.	S0114: 1, H0254: 1, H0255: 1 and S0002: 1.	
HSAYC39	705409	5632	147 - 374	15384	Lys-2 to Arg-7, Gln-13 to Trp-24, Ser-37 to Thr-44.	S0114: 1, L0309: 1 and H0445: 1.	
HSAYC84	723425	5633	219 - 437	15385		S0114: 1 and H0436: 1.	
HSAYG62	745692	5634	75 - 275	15386		S0114: 1, H0318: 1, L0803: 1, L0748: 1 and L0754: 1.	
HSAYH09	971427	5635	3 - 206	15387	Arg-22 to Gly-28, Pro-41 to Pro-48, Gly-56 to Ser-67.	S0114: 2	
HSAYH38	731434	5636	451 - 687	15388	Ala-20 to Gly-36.	S0114: 4, H0556: 1 and H0187: 1.	
HSAYK03	881282	5637	3 - 443	15389	His-1 to His-6, Thr-26 to Ser-31, Pro-92 to Val-97, Gly-114 to Gly-122.	S0114: 1, H0305: 1 and H0589: 1.	
HSAYK26	681730	5638	175 - 357	15390	Ser-24 to His-34.	S0114: 1 and H0305: 1.	
HSAYK79	699056	5639	153 - 266	15391	Ser-1 to Asp-30.	S0114: 2	
HSAYL46	720352	5640	266 - 448	15392		S0114: 1 and H0444: 1.	
HSAYL64	765847	5641	2 - 136	15393		S0114: 2 and L0749: 1.	
HSAYL72	951025	5642	70 - 237	15394		S0114: 2 and H0591: 1.	
HSAYL93	920778	5643	49 - 291	15395	Arg-8 to Pro-16, Leu-19 to Asn-28.	S0114: 1 and S0134: 1.	
HSAYM75	719241	5644	3 - 116	15396		S0114: 1 and H0264: 1.	
HSAYM91	959486	5645	86 - 232	15397	Lys-8 to Cys-13.	S0114: 1 and H0318: 1.	
HSAYN79	471037	5646	276 - 434	15398	Gln-5 to Leu-13.	S0114: 2	
						S0114: 1, S0002: 1, S0426: 1 and H0543: 1.	

HSAYO71	745703	5647	156 - 329	15399	Pro-21 to Gln-31.	S0114: 2	
HSAYR35	675897	5648	75 - 191	15400		S0114: 2	
HSAYS26	681725	5649	3 - 170	15401		S0114: 2 and L0794: 1.	
HSAYS54	730688	5650	242 - 433	15402	Ser-8 to Val-13.	S0114: 1, L0772: 1, L0766: 1 and H0423: 1.	
HSAYW12	856909	5651	87 - 257	15403	Ser-34 to Met-46.	S0114: 1, H0255: 1 and H0423: 1.	
HSAYW75	866818	5652	1 - 189	15404	Gly-1 to Ser-6, Ala-32 to Asp-44.	S0114: 1 and H0576: 1.	
HSAZC11	964994	5653	27 - 206	15405	Glu-46 to Leu-51.	S0114: 2	
HSAZC18	666442	5654	92 - 220	15406		S0114: 2	
HSAZC33	702423	5655	166 - 270	15407		S0114: 3	
HSAZC41	712326	5656	148 - 285	15408	Pro-28 to Val-34.	S0114: 2	
HSAZC69	757577	5657	85 - 231	15409		S0114: 2	
HSAZC70	866814	5658	2 - 238	15410		S0114: 3 and H0402: 1.	
HSAZC72	509611	5659	196 - 366	15411	Thr-1 to Ala-6.	S0114: 3	
HSAZC91	790196	5660	122 - 286	15412		S0114: 2	
HSAZD30	692708	5661	161 - 313	15413		S0114: 2	
HSAZE47	887420	5662	77 - 517	15414	His-10 to Ile-16, Arg-27 to Ser-34, Arg-44 to Asn-49, Tyr-77 to Cys-89.	AR050: 2, AR054: 1, AR051: 1, S0114: 2	
HSAZE66	725704	5663	2 - 247	15415		S0114: 1 and S0052: 1.	
HSAZF25	787070	5664	3 - 257	15416	Leu-75 to Leu-81.	S0114: 2	
HSAZF47	719615	5665	306 - 425	15417		S0114: 1 and H0445: 1.	
HSAZG04	927161	5666	1 - 180	15418	Glu-1 to His-6, Ser-35 to Ala-41, His-52 to Cys-59.	S0114: 2	
HSAZG53	727729	5667	24 - 131	15419		S0114: 1 and H0318: 1.	
HSAZH64	730784	5668	165 - 347	15420	Arg-1 to Gln-8.	S0114: 1 and H0402: 1.	
HSAZI04	927167	5669	27 - 191	15421		S0114: 1 and H0521: 1.	
HSAZK83	781717	5670	1 - 117	15422		S0114: 2	
HSAZN07	847802	5671	158 - 370	15423		S0114: 1 and H0421: 1.	
HSAZP34	796044	5672	214 - 357	15424	Gly-20 to Glu-31.	S0114: 2	
HSAZQ04	927174	5673	2 - 187	15425	Phe-42 to Glu-49.	H0589: 2 and S0114: 1.	

HSMBAA04	927420	5674	43 - 180	15426	Asp-1 to Gln-7, Arg-25 to Ile-32, Gln-37 to Gly-46.	S0298: 1 and S0052: 1.		
HSMBAA53	727597	5675	130 - 195	15427		S0298: 2		
HSMBBA53	964887	5676	2 - 100	15428		S0298: 1 and H0402: 1.		
HSMBBD29	690390	5677	412 - 215	15429		S0298: 1, H0581: 1 and H0542: 1.		
HSQFR23	676362	5678	94 - 291	15430	Asn-28 to Ser-35, Arg-58 to Pro-66.	H0641: 2, S0002: 2, L0766: 2, L0438: 2, L0439: 2, H0657: 1, H0638: 1, H0637: 1, L0763: 1, L0768: 1, L0794: 1, L0655: 1, H0521: 1, H0522: 1, L0779: 1, L0777: 1 and S0026: 1.		
HSYAD19	668590	5679	52 - 132	15431		H0551: 2	8q11	600899
HSYBC05	920174	5680	215 - 385	15432	Asp-11 to His-16, Asn-41 to Ser-47.	H0341: 1, H0402: 1, S0005: 1, H0551: 1 and L0766: 1.		
HSYBF51	883699	5681	2 - 334	15433	Leu-12 to Gly-31.	H0551: 2		
HSYBL15	660053	5682	2 - 286	15434	Pro-26 to Gly-32.	AR061: 1, AR089: 0 S0212: 1, H0551: 1 and L0366: 1.	6q23	107470, 107470, 107470, 121014, 142470, 156225, 164200, 164200, 207800, 601316, 601410, 601757, 602067
HSYBL77	727842	5683	142 - 327	15435	Ser-7 to Asp-12, Arg-30 to Ser-41.	H0341: 1 and H0551: 1.		
HSYCX75	870939	5684	60 - 191	15436		H0551: 2		
HSYDF85	783730	5685	1 - 399	15437	Ser-79 to Gly-86, Pro-93 to Asp-99.	H0069: 1 and H0551: 1.		
HSYDP04	970789	5686	23 - 403	15438	His-3 to Ala-10, Gly-22 to Glu-29, Pro-53 to Pro-59, Leu-106 to Glu-111, Glu-119 to Asn-125.	H0457: 4, H0522: 2 and H0551: 1.		
HTISC71	792728	5687	96 - 326	15439		H0218: 3		

HT2AB63	518444	5688	66 - 263	15440	Gln-59 to Lys-66.	H0139: 2		
HT2SA18	522773	5689	201 - 443	15441	Ser-34 to Ala-40, Asn-61 to Ala-70.	H0220: 2, L0748: 1 and L0749: 1.		
HT2SF05	932853	5690	231 - 467	15442		H0220: 1 and S0053: 1.		
HT2SF45	522759	5691	120 - 320	15443		H0220: 2		
HT2SG56	870913	5692	87 - 320	15444		H0556: 1 and H0220: 1.		
HT2SG66	522753	5693	171 - 305	15445	Lys-12 to Ile-25.	H0220: 2		
HT3AG28	973645	5694	57 - 209	15446	Tyr-1 to Glu-19.	H0140: 3		
HT3AH13	527913	5695	17 - 175	15447	Arg-2 to His-13.	H0140: 2 and L0369: 1.		
HT3BA84	509190	5696	266 - 412	15448		H0159: 2, H0222: 1 and H0422: 1.		
HT3BB93	530750	5697	165 - 266	15449		H0222: 1 and H0159: 1.		
HT3BC30	691009	5698	88 - 201	15450	Arg-14 to Lys-30.	H0223: 1 and H0159: 1.		
HT3BF34	534887	5699	67 - 189	15451		H0222: 1, H0159: 1, H0179: 1 and S0053: 1.		
HT3BG05	932557	5700	3 - 365	15452	Leu-18 to Gln-25.	H0222: 1 and H0159: 1.		
HT3BG34	527779	5701	80 - 166	15453		H0159: 2		
HT3SA07	954360	5702	19 - 210	15454	Val-3 to Leu-9, Lys-14 to Thr-19, Trp-27 to Ser-32.	H0222: 1 and H0264: 1.		
HT3SB56	958400	5703	601 - 912	15455	Phe-27 to Arg-34.	H0222: 1 and H0159: 1.	16p13.13-p13.12	186580, 278760, 601313
HT3SF46	522600	5704	181 - 312	15456		H0222: 1 and H0159: 1.		
HT3SF93	791423	5705	207 - 527	15457	Gly-7 to Met-20, Pro-28 to Leu-33, Met-52 to Cys-58, Arg-92 to Ser-97.	H0222: 1, S0428: 1 and L0601: 1.		
HT3SG30	522532	5706	127 - 258	15458		H0222: 3, H0576: 1 and L0779: 1.		
HT4CF32	887174	5707	133 - 846	15459	Gly-1 to Val-16, Thr-114 to Arg-119.	AR050: 48, AR054: 34, AR051: 20 H0141: 5, H0585: 5, L0805: 2, H0638: 1, H0606: 1, L0369: 1, L0761: 1, L0800: 1, L0771: 1, L0768: 1, L0766: 1 and L0806: 1.		

HT4CL83	974117	5708	178 - 489	15460	Val-18 to Thr-23, Val-42 to Trp-49, Glu-65 to Tyr-70.	H0585: 6 and H0141: 2.		
HT4CM20	805558	5709	195 - 449	15461		H0585: 8 and H0141: 3.		
HT4FN75	686279	5710	2 - 127	15462		H0585: 2		
HT4FS23	952837	5711	2 - 178	15463		H0585: 2		
HT4FV06	935056	5712	1 - 87	15464	Leu-2 to Pro-8.	H0585: 1 and H0576: 1.		
HT4GF30	870887	5713	6 - 245	15465	Thr-14 to Arg-23, Gly-37 to Phe-50.	H0585: 17, H0141: 7, L0804: 4, H0641: 2, L0769: 2, L0800: 2, L0803: 2, L0809: 2, L0731: 2, L0763: 1, L0761: 1, L0773: 1, L0789: 1, L0747: 1, L0777: 1 and H0422: 1.		
HT4GJ85	909971	5714	38 - 526	15466	Gly-115 to Arg-120.	H0585: 9		
HT4SB45	522502	5715	118 - 399	15467		H0224: 3		
HT4SE86	531561	5716	50 - 235	15468		H0224: 1, H0160: 1 and H0225: 1.		
HT4TB12	870955	5717	2 - 277	15469		H0225: 2, H0224: 1 and H0160: 1.		
HT5AD70	960050	5718	3 - 167	15470		H0167: 4		
HT5AH76	921539	5719	2 - 133	15471		H0167: 3		
HT5AI96	728624	5720	2 - 88	15472		H0167: 2		
HT5EA69	952359	5721	12 - 488	15473	Arg-9 to Trp-20, Met-27 to Gly-33, Gln-52 to Ile-57, Gln-60 to Glu-69.	H0584: 10		
HT5EU04	531205	5722	268 - 435	15474	Phe-1 to Glu-11, Gly-17 to Arg-41.	H0584: 9, H0167: 2, H0271: 1 and H0416: 1.		
HT5EU59	739092	5723	1 - 354	15475	Arg-3 to Ala-10, Pro-21 to Thr-36, Gly-38 to Gly-51, Arg-58 to Gly-64.	H0584: 2		
HT5FD31	697721	5724	3 - 335	15476	Ala-32 to Glu-38, Gln-74 to Gly-85.	H0584: 4		
HTAA68	733636	5725	131 - 244	15477	Gln-23 to Asn-29.	H0069: 2		



HTAAA74	960479	5726	1 - 315	15478	Glu-12 to Thr-22, Arg-28 to Ala-33, Leu-45 to Thr-50.	H0069: 2 and L0592: 1.		
HTAAC05	932913	5727	90 - 329	15479	Gly-1 to His-6.	H0069: 5		
HTAAG63	578537	5728	24 - 182	15480		H0402: 2, L0529: 2 and H0069: 1.		
HTAAP36	629270	5729	25 - 135	15481	Glu-13 to Glu-20.	H0069: 2	22	
HTAAP96	518454	5730	24 - 152	15482	Cys-16 to Arg-25, Arg-33 to Leu-41.	H0069: 3 and H0635: 1.		
HTAAQ82	952304	5731	236 - 415	15483		H0069: 3 and H0556: 1.		
HTAAU76	508527	5732	2 - 274	15484	Arg-10 to Arg-17.	H0069: 3		
HTAAU78	870884	5733	76 - 129	15485		H0069: 3		
HTAAW11	961231	5734	57 - 248	15486		H0069: 5		
HTAAW46	719422	5735	3 - 122	15487	Met-1 to Thr-6, Pro-21 to Ser-27.	H0069: 2		
HTAAW81	535295	5736	2 - 166	15488	Gln-11 to Ser-16.	H0069: 5		
HTAAY89	575304	5737	39 - 146	15489		H0069: 3		
HTABE51	960936	5738	103 - 288	15490	Glu-2 to Lys-26.	H0069: 2		
HTABE93	509675	5739	95 - 259	15491		H0069: 3		
HTABF52	535399	5740	113 - 316	15492	Lys-22 to Pro-28.	H0069: 4		
HTABF72	508952	5741	126 - 329	15493	Arg-13 to Arg-18.	H0069: 2		
HTABG03	960931	5742	2 - 220	15494	Arg-1 to Gln-7.	H0069: 9		
HTABG44	508366	5743	142 - 14	15495	Ala-1 to Arg-9.	H0069: 2		
HTABG83	518355	5744	124 - 177	15496		H0069: 2 and H0318: 1.		
HTABG87	940153	5745	75 - 344	15497	Ser-9 to Ser-14, Lys-24 to Ser-30, Cys-34 to Ile-39, Lys-46 to Leu-60.	H0069: 1 and H0581: 1.		
HTABJ93	508441	5746	3 - 263	15498		H0069: 3		
HTABK73	835945	5747	3 - 251	15499	Pro-60 to Lys-68.	H0069: 1, S0144: 1 and S0142: 1.		
HTABN17	954400	5748	3 - 89	15500	Gln-16 to Ile-21.	H0069: 8		
HTACL04	925571	5749	96 - 263	15501	Pro-7 to Thr-27.	H0069: 1 and H0635: 1.		
HTACN31	974314	5750	280 - 408	15502		H0069: 1 and H0635: 1.		
HTACN96	975073	5751	394 - 582	15503		H0069: 3 and H0635: 2.		

HTACP19	537439	5752	3 - 101	15504	Thr-1 to Met-32.	H0069: 2 and H0543: 1.	12q24.3-qter	
HTACP52	968997	5753	200 - 433	15505	Glu-67 to Arg-72.	L0766: 2, H0069: 1 and H0625: 1.		
HTACR92	918250	5754	2 - 271	15506	Gly-10 to Gly-15, Tyr-22 to Lys-31, Glu-70 to Phe-76.	H0069: 1 and H0635: 1.		
HTACS45	537433	5755	57 - 122	15507	Pro-15 to Gly-22.	H0069: 2		
HTACS46	537435	5756	2 - 181	15508		H0069: 2		
HTACT29	537377	5757	119 - 271	15509		S0052: 2 and H0069: 1.		
HTACU21	504612	5758	63 - 143	15510		H0069: 2		
HTACU80	777608	5759	31 - 207	15511		H0069: 1 and S0428: 1.		
	870869	9596	161 - 316	19348	Cys-32 to Asn-38.			
HTACW17	961560	5760	3 - 287	15512	Arg-22 to Thr-28, Pro-41 to Gln-48.	H0069: 1 and H0063: 1.		
HTACY32	531492	5761	290 - 445	15513	Cys-14 to Glu-30.	H0069: 1 and H0264: 1.		
HTACY49	557836	5762	62 - 199	15514	Leu-23 to Ser-29.	H0069: 2		
HTADA22	507146	5763	1 - 297	15515		H0069: 2		
HTADC11	967577	5764	3 - 170	15516	Gln-1 to Pro-6, Ser-15 to Glu-30, Ile-37 to Tyr-42.	H0069: 1, H0635: 1 and L0780: 1.		
HTADH05	932470	5765	44 - 130	15517	Arg-1 to Glu-7.	H0069: 2		
HTADH61	955245	5766	52 - 189	15518		H0069: 2		
HTADI11	964944	5767	2 - 238	15519	Pro-7 to Lys-12, Pro-27 to Gly-39.	H0069: 2		
HTADI93	870820	5768	2 - 172	15520	Ser-45 to Ser-54.	H0069: 1 and H0635: 1.		
HTADI25	537427	5769	58 - 264	15521	Thr-56 to Thr-63.	H0069: 2		
HTADI36	773764	5770	29 - 391	15522	Ser-9 to Ala-16, Lys-19 to Gln-31, Pro-63 to Trp-68, Pro-90 to Gly-98.	H0069: 2		
HTADK40	537423	5771	306 - 461	15523		H0069: 2		
HTADM61	550342	5772	190 - 432	15524	Phe-8 to Cys-15.	H0069: 2 and H0556: 1.		
HTADQ83	734996	5773	56 - 241	15525	Ser-40 to Phe-45, Pro-51 to Arg-58.	H0069: 1 and S0142: 1.		
HTADQ93	537418	5774	1 - 69	15526		H0069: 2		

HTADR41	934435	5775	73 - 225	15527			H0069: 2	
HTADW69	537428	5776	3 - 101	15528			H0069: 2	
HTAED78	761591	5777	188 - 319	15529			H0069: 2	
HTAEF32	927101	5778	217 - 372	15530		Glu-1 to Ile-6.	H0069: 2	
HTAEH74	974303	5779	234 - 377	15531			H0635: 2 and H0069: 1.	
HTAEJ77	930978	5780	3 - 428	15532		His-1 to Arg-20.	H0069: 2 and H0635: 1.	
HTAEK78	773763	5781	303 - 494	15533		Glu-1 to Pro-7.	H0069: 2	
HTAEL90	958220	5782	1 - 147	15534			H0069: 1, H0457: 1 and S0426: 1.	
HTAEO84	537374	5783	3 - 104	15535			H0069: 2	
HTAER18	537421	5784	71 - 205	15536			H0069: 2	
HTAES82	537373	5785	126 - 254	15537		Asp-10 to Asp-16, Gln-29 to Ala-35.	H0069: 3	
HTAET86	969532	5786	2 - 298	15538			H0069: 1 and H0635: 1.	
HTAEU76	767963	5787	311 - 568	15539		Ser-1 to Glu-10, Ser-53 to Phe-59.	H0069: 1 and H0264: 1.	
HTAEV65	838803	5788	169 - 402	15540			H0069: 1, H0635: 1 and L0523: 1.	
HTAEW87	971526	5789	243 - 329	15541		Ile-1 to Gln-7.	H0069: 4	
HTAEW95	780986	5790	28 - 462	15542			H0584: 2, H0265: 1 and H0069: 1.	
HTAEX66	881092	5791	209 - 487	15543		Arg-65 to Asp-70.	H0069: 5	
HTAFA06	934570	5792	107 - 322	15544		Ala-29 to Tyr-45, Gly-53 to Ala-60.	H0069: 2	
HTAFA66	868433	5793	167 - 454	15545		Pro-38 to Trp-51, Asp-53 to Gly-59, Thr-70 to Trp-78.	H0069: 1 and H0581: 1.	
HTAFC37	973085	5794	359 - 93	15546		Gln-1 to Gly-7, Pro-16 to Asp-28, Arg-66 to Asp-73.	H0069: 2, L0794: 1, L0803: 1 and L0758: 1.	
HTAFC76	767976	5795	46 - 303	15547		Asp-68 to Gly-80.	H0069: 2	
HTAFD63	744409	5796	68 - 21	15548			H0069: 2	
HTAFE69	944409	5797	25 - 366	15549		Lys-14 to Glu-32.	AR061: 7, AR089: 5 H0069: 3, L0794: 1, L0803: 1 and L0758: 1.	

HTAFE90	787604	5798	134 - 232	15550			H0069: 1 and H0090: 1.		
HTAFF11	933028	5799	99 - 338	15551	Trp-36 to Tyr-58, Ser-74 to Asp-80.		H0069: 2		
HTAFF76	767968	5800	226 - 393	15552			H0069: 2		
HTAFG52	974338	5801	23 - 283	15553			H0069: 1, H0635: 1 and S0216: 1.		
HTAFG58	870854	5802	3 - 239	15554	Gln-2 to Leu-10.		H0069: 1 and H0635: 1.		
HTAGA71	870853	5803	137 - 304	15555			H0069: 1 and H0635: 1.		
HTAGB89	974060	5804	258 - 371	15556			H0635: 2 and H0069: 1.		
HTAGC91	963125	5805	164 - 397	15557	Gln-17 to Gly-23.		H0635: 4		
HTAGI29	925699	5806	155 - 334	15558			H0556: 1, H0635: 1 and S0474: 1.		
HTAGI53	936117	5807	1 - 198	15559	Gly-7 to Gly-16.		H0271: 2, H0255: 1 and H0635: 1.		
HTAGL61	963182	5808	1 - 363	15560	Ala-1 to Gln-11, Lys-30 to Lys-40, Arg-52 to His-73, Asp-109 to Leu-114.		H0635: 3		
HTAGN04	926501	5809	294 - 473	15561	Lys-46 to Arg-52.		H0635: 2 and L0748: 1.		
HTAGV46	847777	5810	2 - 238	15562	Asp-54 to Ser-63, Ser-65 to Gln-79.		H0635: 2 and S0116: 1.		
HTAGV49	836078	5811	130 - 435	15563	Lys-13 to Leu-20, Ser-39 to Arg-46.		H0635: 2 and L0766: 1.		
HTAGZ11	965867	5812	104 - 280	15564	Cys-37 to His-45.		S0114: 1 and H0635: 1.		
HTAHL17	860919	5813	2 - 292	15565	Pro-7 to Gly-15, Pro-37 to Gly-42.		H0635: 1 and H0271: 1.		
HTAHL49	934013	5814	243 - 494	15566	Asn-52 to Gln-59.		H0635: 2 and H0069: 1.		
HTAHL12	920332	5815	249 - 458	15567			H0635: 1 and H0422: 1.		
HTAHL28	974030	5816	3 - 359	15568	Val-2 to Pro-7, Ala-17 to Gly-24, Arg-26 to Leu-32, Cys-36 to Arg-49, Arg-56 to Gly-67, Asn-69 to Trp-76, Gly-79 to Pro-89, Tyr-108 to Ile-113.		H0635: 3		

HTAHL45	908949	5817	139 - 663	15569	Leu-14 to Lys-20, Glu-28 to Ala-67, Pro-81 to Gln-88, Leu-128 to Lys-137.	AR061: 314, AR089: 160 H0635: 2 and L0439: 2.		
HTAHL76	974300	5818	2 - 202	15570		H0635: 2 and H0556: 1.		
HTAHN29	923115	5819	317 - 580	15571	Gly-1 to Cys-17, His-59 to Pro-69, Arg-82 to Ile-88.	H0556: 1, H0635: 1 and H0543: 1.		
HTAHQ22	870831	5820	5 - 289	15572	Leu-8 to Ser-16, Ser-25 to Glu-32, Gly-71 to Lys-79.	H0635: 2		
HTAHQ94	839505	5821	248 - 520	15573		H0635: 2		
HTAHR03	922772	5822	267 - 380	15574		H0069: 1 and H0635: 1.		
HTAHR06	934062	5823	203 - 358	15575	Ser-7 to Gln-18, Pro-44 to Asp-51.	H0457: 2, H0635: 1 and H0445: 1.		
HTAHS10	963183	5824	9 - 218	15576	Asn-6 to His-12.	H0635: 3		
HTAHS21	960795	5825	3 - 380	15577	Cys-12 to Pro-17, Arg-45 to Cys-54, Glu-58 to Ile-67, Val-100 to Gln-105.	H0069: 1 and H0635: 1.		
HTAHV04	926747	5826	3 - 449	15578		H0635: 2, L0746: 2, L0770: 1, L0769: 1, L0659: 1 and L0745: 1.		
HTAIB11	965835	5827	2 - 118	15579		H0635: 2		
HTAIC05	930951	5828	622 - 819	15580	Asn-10 to Ser-16.	L0749: 5, H0635: 1, S0426: 1 and L0748: 1.		
HTAID04	926541	5829	200 - 403	15581	Glu-32 to Ser-38.	H0069: 2 and H0635: 1.		
HTAIF70	974062	5830	2 - 214	15582		H0069: 2, H0635: 1 and H0179: 1.		
HTAIF78	870785	5831	22 - 363	15583	Leu-1 to Gly-8, Ser-74 to Gly-84, Pro-97 to Gly-108.	H0556: 3, H0069: 1, H0635: 1, H0318: 1, S0344: 1 and L0766: 1.		
HTAIK75	870815	5832	282 - 470	15584	Pro-8 to Val-15.	H0635: 1 and H0542: 1.		
HTAIQ39	921729	5833	19 - 249	15585		H0069: 1 and H0635: 1.		
HTAIQ75	870804	5834	3 - 281	15586	Arg-9 to Gly-15, Ser-57 to Gln-68.	H0635: 2		

HTAIR54	870814	5835	106 - 327	15587	Thr-33 to Phe-38.	L0600: 2, H0635: 1 and H0264: 1.	9q11-q22	229600, 264300, 600542, 602014, 602088
HTAIU80	968234	5836	23 - 205	15588	Ser-30 to Asp-36.	H0635: 1 and H0271: 1.		
HTAIV79	870874	5837	63 - 368	15589	Pro-4 to Leu-14, Ser-43 to Pro-49.	H0069: 1 and H0635: 1.		
HTAJG31	926731	5838	282 - 452	15590	His-18 to Cys-24.	H0635: 2		
HTAJG65	975260	5839	152 - 355	15591	His-59 to Leu-66.	H0635: 3 and H0069: 1.		
HTAJI01	914899	5840	160 - 2	15592		H0635: 2		
HTAJN08	958057	5841	2 - 160	15593		H0635: 2		
HTAJR80	975309	5842	183 - 380	15594		H0635: 3		
HTBAA95	715044	5843	2 - 478	15595	His-1 to Glu-14, Thr-22 to Ser-28, Pro-36 to Val-44, Glu-80 to Asp-91.	H0075: 1 and H0521: 1.		
HTDAA07	870742	5844	3 - 209	15596	Asp-1 to Gly-9.	H0486: 1 and H0477: 1.		
HTDAC37	575842	5845	3 - 227	15597	Ser-62 to Glu-75.	H0477: 2 and L0041: 1.		
HTDAC77	772242	5846	51 - 233	15598		H0556: 1 and H0477: 1.		
HTDAE25	714359	5847	506 - 694	15599	Leu-19 to His-29.	H0635: 1 and H0477: 1.		
HTDAE43	889311	5848	2 - 169	15600		H0457: 1 and H0477: 1.		
	971582	9597	390 - 638	19349	Pro-27 to Gly-34.			
HTDAF65	927842	5849	415 - 672	15601	Gly-4 to Tyr-10.	H0581: 2, H0477: 1, H0272: 1 and L0766: 1.		
HTDAG18	975317	5850	236 - 520	15602	Val-7 to Gly-19, Thr-51 to Thr-56, Ser-62 to Gly-72.	H0069: 2, H0635: 1 and H0477: 1.		
HTDAI42	576013	5851	46 - 180	15603	Asn-35 to Ser-40.	H0477: 1 and H0422: 1.		
HTGAL23	574100	5852	96 - 308	15604		S0134: 2 and L0594: 1.		
HTGAM06	935798	5853	2 - 298	15605	Ile-12 to Thr-17.	S0134: 2		
HTGAM26	682040	5854	2 - 175	15606	Ile-1 to Phe-13, Leu-16 to Arg-33, Ser-45 to Ser-50.	S0134: 1 and H0341: 1.		
HTGAM42	578797	5855	31 - 126	15607		S0134: 2		
HTGAN20	578804	5856	1 - 327	15608	Gly-1 to Pro-13, Lys-20 to Val-33, Pro-74 to Glu-84.	S0134: 2		

HTGAO17	876650	5857	3 - 569	15609	Arg-41 to Asn-46, Pro-96 to Lys-102, Ala-122 to Glu-127.	S0134: 1, T0042: 1 and H0543: 1.		
HTGAR40	664270	5858	67 - 216	15610	Glu-17 to Ile-29.	S0134: 2		
HTGAR72	574681	5859	1 - 291	15611	Gly-1 to Cys-8, Glu-11 to Gly-19.	S0134: 1 and H0271: 1.		
HTGAS32	835534	5860	258 - 458	15612	Gly-15 to Glu-20, Gly-24 to Cys-30.	S0134: 1, L0623: 1, H0087: 1, H0445: 1 and L0599: 1.		
HTGAT93	791508	5861	1 - 153	15613		S0134: 1 and H0436: 1.		
HTGAV59	870798	5862	241 - 420	15614	Pro-11 to Thr-19.	S0134: 3		
HTGAW37	752829	5863	2 - 172	15615		S0134: 1 and H0318: 1.		
HTGAW75	572404	5864	201 - 422	15616	Thr-1 to Ser-8, Gly-13 to Lys-19.	S0134: 1 and H0179: 1.		
HTGAX19	782877	5865	46 - 294	15617	Ser-35 to Thr-42.	S0134: 1, H0581: 1 and H0576: 1.		
HTGAY36	923716	5866	122 - 319	15618		S0134: 1 and H0576: 1.		
HTGAY79	775299	5867	2 - 208	15619		S0134: 1 and H0522: 1.		
HTGAZ62	870414	5868	345 - 157	15620		S0134: 2		
HTGAZ79	584717	5869	13 - 183	15621		S0134: 1, T0041: 1 and L0748: 1.		
HTGBE53	685648	5870	24 - 332	15622	Ala-22 to Phe-28.	S0114: 1 and S0134: 1.		
HTGBE76	954599	5871	287 - 613	15623	Val-95 to Arg-101.	H0341: 2, S0134: 1, L0759: 1 and H0543: 1.		
HTGBF16	572499	5872	184 - 420	15624	Ser-33 to Leu-45.	L0748: 3, S0134: 1 and H0271: 1.		
HTGBF62	753962	5873	53 - 298	15625		S0134: 1 and S0002: 1.		
HTGBF90	786611	5874	2 - 217	15626		S0134: 1, H0581: 1 and H0543: 1.		
HTGBG55	966903	5875	3 - 164	15627	Pro-18 to Ala-33.	S0134: 1, L0779: 1 and H0543: 1.		
HTGBH18	579103	5876	102 - 260	15628	Glu-9 to Cys-15, His-45 to Arg-53.	S0134: 1 and S0116: 1.		
HTGBH55	735751	5877	83 - 595	15629		S0278: 2 and S0134: 1.		
HTGBI93	787110	5878	3 - 221	15630	Arg-37 to Leu-42.	S0134: 1 and H0305: 1.		
HTGBJ55	579005	5879	181 - 357	15631		S0134: 1 and H0354: 1.	Xq28	300031, 300044, 300048, 300049,

									30049, 30055, 300100, 300100, 300104, 300126, 301201, 301590, 302060, 302060, 302060, 302060, 302960, 303700, 303800, 303900, 304800, 305900, 305900, 305900, 306700, 306995, 308310, 308840, 308840, 308840, 309200, 309548, 309620, 309900, 310300, 310400, 310460, 310460, 311300, 311510, 314300, 314400
HTGBK66	772325	5880	78 - 341	15632	Pro-8 to Trp-15.	S0134: 2			
HTGBL34	572643	5881	66 - 281	15633	Ala-29 to Arg-41.	S0134: 1 and H0090: 1.			
HTGBL72	576641	5882	35 - 238	15634		S0134: 1 and H0423: 1.			
HTGBN09	506500	5883	3 - 215	15635	Asn-32 to His-39.	S0134: 2			
HTGBN27	683557	5884	222 - 145	15636		S0134: 2 and S0002: 1.			
HTGBN57	578806	5885	1 - 270	15637		S0134: 2			
HTGBP65	870406	5886	54 - 239	15638	Glu-28 to Ser-33.	S0134: 2			
HTGBR20	669797	5887	144 - 311	15639	Lys-32 to Gln-37.	S0134: 1 and S0344: 1.			
HTGBR93	973978	5888	3 - 272	15640		S0134: 3			
HTGBS02	920445	5889	91 - 234	15641		S0134: 2			
HTGBY51	506502	5890	22 - 228	15642	Gln-54 to Glu-60.	S0134: 2			
HTGCD10	964884	5891	82 - 288	15643	Leu-27 to Ser-33, Gln-46 to Ala-53.	S0134: 1 and S0218: 1.			
HTGCD85	579028	5892	121 - 327	15644		S0134: 2			
HTGCF49	723090	5893	122 - 559	15645	His-1 to Gly-19, Ala-26 to Gly-31, Pro-48 to Ser-57.	S0134: 1 and H0444: 1.			



HTGCG89	894005	5894				Ala-83 to Asn-117.				
HTGCH58	909849	5895	3 - 155	15646	Asn-1 to Val-6.					
			408 - 1103	15647	Arg-25 to Glu-32, Ser-73 to Lys-85, Asp-138 to Gln-145, Glu-164 to Asp-174, Leu-185 to Lys-194.					
HTGCI80	588166	5896	79 - 243	15648						S0134: 1 and H0576: 1.
HTGCI54	571389	5897	88 - 276	15649	Thr-1 to Thr-6.					AR089: 2, AR061: 1
HTGCL06	935789	5898	204 - 338	15650						L0766: 2, L0776: 2, L0740:
HTGCL40	578774	5899	100 - 219	15651						2, S0134: 1, H0635: 1,
HTGCL94	747573	5900	1 - 183	15652						L0370: 1, S0142: 1, L0792:
										1, H0521: 1, H0522: 1,
										L0779: 1 and L0366: 1.
										S0134: 1, L0471: 1, L0753:
										1 and H0543: 1.
										S0134: 2 and S0114: 1.
										S0134: 1 and H0580: 1.
										S0134: 2
										AR054: 10, AR050: 7,
										AR051: 3
										S0134: 2
HTGCM13	913673	5901	1 - 132	15653						S0134: 2
HTGCM90	678122	5902	80 - 358	15654	Glu-71 to Val-77.					S0114: 1 and S0134: 1.
HTGCM92	578768	5903	1 - 138	15655	Ser-13 to Arg-23.					S0134: 2
HTGCP76	770143	5904	10 - 144	15656	Gln-1 to Trp-25.					S0134: 1 and H0421: 1.
HTGCQ15	880293	5905	128 - 391	15657						S0134: 1, S0218: 1, S0002:
										1 and L0748: 1.
HTGCQ19	974433	5906	70 - 279	15658	Pro-41 to Cys-46.					S0134: 2 and H0543: 1.
HTGCS20	933260	5907	2 - 205	15659						S0134: 1 and H0486: 1.
HTGCS81	921650	5908	15 - 167	15660						S0134: 2
HTGCT54	960912	5909	55 - 204	15661	Asn-15 to Trp-34.					S0134: 1 and H0543: 1.
HTGCT57	496297	5910	49 - 213	15662						S0134: 1 and S0002: 1.
HTGCU25	679403	5911	124 - 279	15663	Arg-1 to Phe-7.					S0134: 1 and S0002: 1.
HTGCU28	713353	5912	43 - 165	15664	Gly-1 to Lys-15.					S0134: 1 and S0218: 1.
HTGDG28	735002	5913	99 - 266	15665	Asn-20 to Gly-28.					S0134: 2 and S0114: 1.
HTGDG63	579127	5914	113 - 298	15666	Phe-11 to Glu-25, Lys-33 to Arg-51.					S0134: 2 and S0114: 1.
HTGDG70	757191	5915	75 - 230	15667	Gly-2 to Gln-7.					S0134: 2
HTGDG75	769010	5916	9 - 116	15668						S0134: 1 and H0444: 1.
HTGDM56	733405	5917	240 - 365	15669	Gly-12 to Val-29.					S0134: 1 and S0218: 1.

HTGDM65	967158	5918	2 - 355	15670	Gln-20 to Ala-26, Thr-58 to Lys-65, Gly-83 to Glu-89.	S0114: 2, S0134: 1 and H0255: 1.		
HTGDS63	958651	5919	161 - 373	15671	Pro-10 to Arg-15.	S0134: 1 and S0218: 1.		
HTGDS88	659766	5920	71 - 208	15672	Ile-20 to Thr-25.	S0134: 1 and S0218: 1.		
HTGDT91	974962	5921	306 - 638	15673	Pro-12 to Asn-20, Asp-43 to Arg-49.	AR089: 0, AR061: 0 S0134: 1 and H0069: 1.		
HTGDU57	712249	5922	270 - 536	15674	Gln-25 to Val-30.	H0543: 2 and S0134: 1.		
HTGDV50	708605	5923	336 - 464	15675		S0134: 1 and H0090: 1.		
HTGDW16	661477	5924	322 - 516	15676	Arg-1 to Lys-7.	S0134: 2 and L0599: 1.		
HTGDW40	710759	5925	50 - 220	15677		S0134: 3, H0556: 1 and S0216: 1.		
HTGDW96	967030	5926	208 - 1356	15678	Arg-157 to Asn-172, Val-179 to Leu-185, Arg-206 to Ile-215, Ser-232 to Thr-241, Glu-374 to Pro-379.	AR089: 10, AR061: 8 S0134: 1, S0278: 1, S0144: 1, S0344: 1 and H0423: 1.		
HTGDX29	883517	5927	169 - 462	15679	His-20 to Cys-27, Ala-40 to Ile-54.	S0134: 1 and S0426: 1.		
HTGEB95	725254	5928	137 - 397	15680	Glu-8 to Gln-13, Glu-43 to Ser-53.	L0776: 6, H0591: 2, S0218: 1, L0805: 1, H0521: 1 and H0543: 1.		
HTGED32	698776	5929	612 - 773	15681	Leu-13 to Pro-29.	S0218: 1 and H0306: 1.		
HTGED54	729223	5930	1 - 462	15682		S0114: 1 and S0218: 1.		
HTGED59	711417	5931	3 - 182	15683		S0218: 1 and H0306: 1.		
HTGED69	754761	5932	35 - 169	15684		S0134: 1 and S0218: 1.		
HTGEF77	771825	5933	337 - 498	15685	Leu-13 to Phe-20, Leu-28 to Gly-46.	H0556: 1 and S0218: 1.		
HTGEF78	769764	5934	1 - 147	15686		S0218: 2		
HTGEG76	769765	5935	3 - 212	15687		S0218: 1 and H0521: 1.		
HTGEL46	685425	5936	323 - 457	15688		AR089: 0, AR061: 0 S0218: 1, H0264: 1 and S0053: 1.		
HTGEL54	728905	5937	166 - 384	15689	Thr-41 to Asp-58.	S0218: 2		
HTGEL55	684871	5938	45 - 302	15690	His-25 to Ala-37.	S0114: 1 and S0218: 1.		
HTGEO46	674409	5939	268 - 417	15691	Pro-9 to Asp-21.	S0218: 1 and H0436: 1.		

HTGEO86	703733	5940	57 - 272	15692	Arg-1 to Ser-11, Asp-21 to Leu-29.	S0218: 2		
HTGEO94	723097	5941	422 - 622	15693		S0218: 1 and H0063: 1.		
HTGEP20	799683	5942	13 - 276	15694	Ser-3 to Ser-10, Pro-37 to Thr-44, Phe-67 to Gln-74.	H0264: 2 and S0218: 1.		
HTGEP92	789681	5943	44 - 352	15695		S0218: 1 and S0428: 1.		
HTGEQ11	967047	5944	3 - 311	15696	Arg-1 to Gly-8, Pro-26 to Gly-34.	AR089: 1, AR061: 1 S0218: 2		
HTGEQ34	703443	5945	27 - 161	15697	Lys-16 to Asn-23.	S0218: 2		
HTGEQ40	711181	5946	1 - 69	15698		S0218: 2		
HTGEQ61	741828	5947	39 - 218	15699	Lys-28 to Asn-35.	S0218: 1, H0444: 1 and H0422: 1.		
HTGEQ68	753031	5948	178 - 330	15700	Val-23 to Pro-31.	S0218: 2		
HTGER72	683469	5949	96 - 215	15701		S0218: 1 and S0053: 1.		
HTGET46	719048	5950	1 - 270	15702	Gly-1 to Cys-6, Leu-18 to Lys-26, Glu-33 to Arg-43, Ile-63 to Ile-82.	S0218: 2 and H0580: 1.		
HTGET82	778928	5951	158 - 310	15703		S0218: 1 and H0521: 1.		
HTGEU06	935470	5952	3 - 128	15704		S0114: 1 and S0218: 1.		
HTGFC20	668924	5953	2 - 232	15705	Gln-8 to Asn-17, Asp-24 to Gln-30, Arg-41 to Cys-48, Ala-71 to Phe-77.	S0218: 1 and H0255: 1.		
HTGFC70	757193	5954	206 - 364	15706		S0218: 2		
HTGFK43	669222	5955	3 - 323	15707	Asp-5 to Thr-13.	S0218: 2 and L0758: 1.		
HTGFN46	974106	5956	313 - 501	15708	Leu-1 to Cys-7.	S0218: 4		
HTGFO51	866957	5957	2 - 166	15709	Ser-1 to Cys-8.	S0218: 2 and S0114: 1.		
HTGFO75	767032	5958	53 - 280	15710	His-1 to Lys-6, Val-45 to Tyr-54.	H0265: 1 and S0218: 1.		
HTGFP07	952555	5959	147 - 341	15711	Val-9 to Val-15, Trp-44 to Arg-54.	S0218: 2, L0369: 1 and L0376: 1.		
HTGFP49	722626	5960	90 - 239	15712	Met-27 to Ser-33.	S0218: 2		
HTGFP59	738974	5961	31 - 135	15713	Tyr-10 to Gly-17.	S0218: 2		
HTGFP62	742908	5962	32 - 223	15714		S0218: 2		

HTGFR80	810302	5963	27 - 257	15715	Leu-70 to Ser-76.	S0134: 1 and S0218: 1.	
HTGFW29	690276	5964	1 - 249	15716	Gly-20 to Pro-27.	S0218: 1 and H0264: 1.	
HTGFW63	744678	5965	167 - 556	15717		L0747: 2, S0218: 1 and H0423: 1.	
HTGFX16	656777	5966	3 - 329	15718	Pro-33 to Ala-46, Asn-54 to Val-69, Pro-73 to Ser-78, Glu-93 to Pro-101.	S0218: 1 and H0581: 1.	
HTGFX82	779055	5967	75 - 278	15719	Asn-34 to Lys-40.	S0218: 2	
HTGFZ03	923443	5968	3 - 275	15720		AR089: 1, AR061: 1 S0218: 1 and H0485: 1.	
HTGFZ35	707730	5969	13 - 285	15721	Ser-60 to Leu-66.	S0218: 2	
HTGFZ58	735683	5970	59 - 190	15722		H0265: 1 and S0218: 1.	
HTGGL08	958583	5971	2 - 232	15723		S0218: 2	
HTGGL11	966328	5972	3 - 158	15724		S0218: 2	
HTGGL23	974590	5973	3 - 449	15725		S0218: 2	
HTGGL32	698714	5974	114 - 266	15726	Asp-1 to Ser-7, Lys-23 to Ile-28.	S0218: 2	
HTGGL43	714932	5975	36 - 218	15727	Leu-11 to Gln-16.	S0218: 2	
HTGGL79	774657	5976	2 - 103	15728	Thr-1 to Asn-10.	S0218: 2	
HTGGM20	669083	5977	7 - 129	15729	Arg-20 to Gly-26.	S0218: 1, S0212: 1, H0318: 1 and L0648: 1.	
HTGGN13	869239	5978	2 - 235	15730	Pro-10 to Ala-16.	S0218: 2 and H0556: 1.	
HTGGN92	927051	5979	3 - 197	15731		H0556: 1 and S0218: 1.	
HTHAA47	503638	5980	59 - 313	15732		H0222: 1 and H0062: 1.	
HTHBA07	954426	5981	27 - 203	15733		H0063: 2 and L0657: 1.	
	954427	9598	265 - 62	19350			
HTHBA18	502818	5982	3 - 128	15734		H0063: 2	
HTHBA68	915256	5983	3 - 392	15735		H0556: 1 and H0063: 1.	
HTHBC31	578568	5984	259 - 468	15736	Tyr-10 to Thr-16.	H0063: 1 and H0423: 1.	
HTHBC37	502935	5985	101 - 256	15737	Thr-6 to Leu-11.	H0063: 2	
HTHBG67	964562	5986	172 - 318	15738		H0220: 1, H0486: 1, H0063: 1 and H0625: 1.	
HTHBK65	526716	5987	1 - 132	15739		H0063: 2	
HTHBL65	921965	5988	1 - 366	15740	Glu-6 to Thr-17,	H0402: 1 and H0063: 1.	

HTHB009	531115	5989	3 - 140	15741	Trp-23 to Arg-38.			
HTHBQ94	529671	5990	85 - 243	15742	Lys-11 to Glu-19.		S0114: 1 and H0063: 1.	
HTHBU75	557957	5991	2 - 133	15743	Pro-23 to Glu-35.		H0063: 1 and H0264: 1.	
HTHBW69	757741	5992	85 - 246	15744			H0265: 1 and H0063: 1.	
HTHBY64	712474	5993	320 - 493	15745	Ser-25 to Trp-30.		H0318: 1 and H0063: 1.	
HTHCA17	572407	5994	107 - 298	15746	Lys-19 to Leu-24.		H0063: 2 and S0052: 2.	
HTHCA75	712649	5995	208 - 477	15747			H0063: 1 and H0264: 1.	
HTHCB68	660309	5996	3 - 359	15748	His-1 to Ser-7, Thr-33 to Gly-40.		H0063: 1, H0272: 1 and L0749: 1.	
HTHCB83	578858	5997	109 - 321	15749	Cys-24 to Asn-33, Ala-53 to Ser-61.		H0063: 2	2q37.2
HTHCC54	578877	5998	131 - 340	15750	His-8 to Asp-13, Arg-21 to Cys-29.		H0063: 2	
HTHCD17	664274	5999	62 - 331	15751	Asp-1 to Glu-6.		H0063: 2	
HTHCD91	973272	6000	407 - 535	15752			H0063: 3	
HTHCG11	967275	6001	117 - 245	15753	Tyr-29 to Ile-37.		H0063: 1 and H0521: 1.	
HTHCG86	578843	6002	1 - 165	15754	Gly-1 to Lys-12, Arg-19 to Ser-27.		H0063: 1 and H0543: 1.	
HTHCH22	630239	6003	293 - 547	15755			H0305: 1, H0589: 1, H0063: 1 and L0591: 1.	
HTHCJ42	578875	6004	82 - 291	15756			H0063: 2	
HTHCK38	579080	6005	3 - 275	15757			H0063: 1 and H0264: 1.	
HTHCK42	870355	6006	239 - 376	15758			H0063: 2	
HTHCK91	922873	6007	1 - 141	15759			H0063: 1 and S0426: 1.	
HTHCM08	959719	6008	20 - 268	15760	Lys-19 to Asn-27.		H0063: 2	
HTHCM19	842036	6009	199 - 375	15761	Gly-24 to Arg-29.		H0305: 3, H0581: 1 and H0063: 1.	
HTHCM39	578831	6010	147 - 350	15762	Asn-28 to Phe-43.		H0063: 2	
HTHCN38	578826	6011	183 - 371	15763	Pro-1 to Ser-9.		H0063: 2	
HTHCO28	705888	6012	1 - 231	15764			S0114: 1 and H0063: 1.	
HTHCO92	578757	6013	1 - 84	15765			L0794: 3, L0766: 2, H0581: 1, H0063: 1, L0792: 1, L0438: 1, L0439: 1 and	

HTHCQ31	926330	6014	391 - 624	15766	Leu-48 to Arg-60.	L0779: 1. H0063: 1, L0766: 1, L0748: 1 and H0543: 1.		
HTHCQ63	959994	6015	224 - 361	15767		S0116: 2 and H0063: 1.		
HTHCR16	578722	6016	3 - 296	15768	His-1 to Pro-14, Arg-19 to Val-25, Cys-29 to His-42, Pro-62 to Arg-68, Cys-83 to Glu-92.	H0063: 2		
HTHCT64	856477	6017	44 - 286	15769	Glu-1 to Ala-11.	H0063: 1 and H0445: 1.		
HTHCU43	578849	6018	199 - 297	15770		H0063: 2		
HTHCU85	578851	6019	159 - 314	15771	Lys-35 to Gly-42.	H0063: 2		
HTHCV21	671098	6020	2 - 211	15772	Asn-45 to Ser-50.	S0134: 1, L0717: 1, H0063: 1 and L0749: 1.	104770, 107670, 110700, 145001, 146760, 146790, 159440, 159440, 159440, 186780, 191030, 191315, 600923, 601412, 601652, 601863, 602491	
HTHCV22	419714	6021	2 - 205	15773	Gly-48 to Lys-55.	H0063: 2		
HTHCV59	937393	6022	45 - 374	15774	Leu-71 to Gly-78.	AR089: 17, AR061: 10 H0318: 1 and H0063: 1.		
HTHCW35	707732	6023	55 - 147	15775		H0580: 1 and H0063: 1.		
HTHCW45	578823	6024	3 - 152	15776	Ile-16 to His-22.	H0063: 2		
HTHCW83	578828	6025	73 - 252	15777	Leu-1 to Lys-8, Thr-20 to Asn-26.	H0063: 2		
HTHCX84	578874	6026	29 - 280	15778		H0063: 2		
HTHCY12	971165	6027	222 - 515	15779	Pro-22 to Pro-32, Arg-40 to Lys-50, Ala-69 to Gly-74.	L0766: 3, H0063: 2, L0769: 1, L0779: 1 and L0759: 1.		
HTHCZ96	578876	6028	94 - 306	15780	Arg-1 to Thr-7, Phe-27 to Ala-47.	H0063: 2		
HTHDD40	707065	6029	2 - 367	15781	Arg-18 to Val-37.	H0063: 2		
HTHDE26	869483	6030	160 - 546	15782	Pro-52 to Leu-58.	H0063: 1, H0576: 1 and		

HTHDE44	791641	6031	286 - 363	15783		H0445: 1.		
HTHDE91	967215	6032	164 - 307	15784		H0063: 1 and S0428: 1.		
HTHDF38	870339	6033	1 - 186	15785	Asn-10 to Leu-15, Phe-35 to Leu-42, Ser-56 to Arg-62.	H0063: 1 and H0423: 1.		
HTHDE24	574675	6034	84 - 242	15786	Val-4 to His-15.	H0637: 1, H0063: 1, L0598: 1, H0542: 1 and H0423: 1.		
HTHDE34	490926	6035	78 - 1	15787	Lys-1 to Thr-9, Leu-17 to Arg-26.	H0250: 1, H0271: 1 and H0063: 1.		
HTHDI31	973304	9599	332 - 457	19351		H0063: 5		
HTHDI43	959718	6036	173 - 304	15788		H0063: 2		
HTHDI43	870335	6037	1 - 243	15789	Ser-40 to Asp-46, Val-48 to Lys-63.	H0063: 2		
HTHDM25	578878	6038	145 - 333	15790		H0063: 2 and L0519: 1.		
HTHDM65	579199	6039	145 - 252	15791		H0063: 2		
HTHDM69	578834	6040	213 - 383	15792	Asn-3 to Gly-11.	H0063: 2		
HTHDP70	578882	6041	134 - 268	15793		H0063: 2		
HTHDQ85	966858	6042	33 - 227	15794	Lys-37 to Gly-43, Phe-57 to Thr-65.	H0063: 1 and H0272: 1.		
HTHDR09	579076	6043	2 - 220	15795	Arg-1 to Gly-16, Ala-28 to Ala-34, Ser-40 to Lys-53.	H0063: 2		
HTHDR24	578848	6044	2 - 208	15796	Ala-1 to Lys-13, Leu-19 to Ile-24, Tyr-26 to Ile-31, Pro-40 to Lys-46.	H0063: 2		
HTHDE80	764136	6045	400 - 558	15797	Leu-19 to Arg-31.	H0580: 1 and H0063: 1.		
HTJAB35	491273	6046	519 - 313	15798		AR089: 14, AR061: 3 H0063: 2, H0487: 1 and H0445: 1.		
	853995	9600	358 - 185	19352				
	880424	9601	239 - 457	19353				
HTJAB39	705432	6047	111 - 260	15799		L0539: 1, H0580: 1 and H0487: 1.		
HTJAD26	681865	6048	112 - 348	15800	Thr-59 to His-67.	H0487: 1 and S0002: 1.		

HTJAE28	703321	6049	113 - 292	15801			H0487: 1 and H0423: 1.		
HTJAE42	668339	6050	245 - 379	15802			H0583: 1, H0487: 1, L0805: 1 and L0740: 1.		
HTJMB71	760226	6051	448 - 200	15803			H0265: 1, H0402: 1, H0488: 1 and H0522: 1.		
	760247	9602	448 - 200	19354					
HTJMD95	924240	6052	222 - 368	15804			H0488: 2		
HTJMH80	774407	6053	115 - 393	15805		Glu-1 to Tyr-7.	H0488: 3		
HTJMQ69	754605	6054	104 - 310	15806			H0591: 2 and H0488: 1.		
HTJMR65	729039	6055	1 - 120	15807		Gly-1 to Gly-9, Pro-16 to Leu-25.	H0488: 2		
HTJMT23	948518	6056	2 - 241	15808			H0488: 2		
HTJMT75	766883	6057	253 - 447	15809			H0488: 2 and L0749: 1.		
HTJMU34	870316	6058	2 - 211	15810			H0488: 2		
HTJMU77	771677	6059	2 - 283	15811		Glu-17 to Ser-26, Lys-61 to Lys-70, Phe-86 to Cys-93.	H0488: 1, L0762: 1, H0543: 1 and H0422: 1.		
HTJMU87	870315	6060	1 - 300	15812		Glu-23 to Tyr-28.	H0069: 1 and H0488: 1.		
HTJMV80	775766	6061	29 - 220	15813		Thr-17 to Ser-24, Glu-28 to Lys-38, Ser-43 to Val-49, Ser-56 to Lys-64.	H0488: 2 and L0605: 1.		
HTJMW42	713132	6062	276 - 461	15814			H0271: 1 and H0488: 1.		
HTJMX71	759910	6063	67 - 255	15815		Tyr-54 to Glu-59.	S0212: 1 and H0488: 1.		
HTJMZ90	787655	6064	7 - 102	15816			H0488: 2		
HTJNB83	766881	6065	1 - 138	15817			H0488: 2		
HTJNC42	713142	6066	61 - 222	15818			S0212: 1 and H0488: 1.	8	
HTJNC53	793328	6067	78 - 332	15819			H0488: 2		
HTJND12	870311	6068	196 - 417	15820			H0488: 2		
HTJNI42	924726	6069	2 - 373	15821		Thr-1 to His-6, Phe-8 to Pro-24, Leu-69 to Ser-75.	H0488: 1 and S0002: 1.		
HTJNK36	924939	6070	172 - 441	15822		Arg-19 to Gly-28.	H0271: 2, H0488: 1, L0438: 1 and L0439: 1.		
HTJNM52	795110	6071	7 - 306	15823		Pro-24 to Ala-29.	T0002: 1, H0488: 1 and		



HTJNQ25	771941	6072	2 - 205	15824	Arg-14 to His-23.	L0602: 1.		
HTJNR19	781702	6073	3 - 161	15825		H0318: 1 and H0488: 1.		
HTJNS23	870336	6074	2 - 535	15826	Ser-8 to Lys-15, Pro-30 to Asp-36.	H0265: 1 and H0488: 1. H0063: 1 and H0488: 1.		
HTJNV55	931039	6075	2 - 244	15827		H0581: 1 and H0488: 1.		
HTOAA48	870027	6076	2 - 265	15828		H0264: 2		
HTOAF15	866201	6077	2 - 610	15829	Tyr-51 to Glu-57, Ser-164 to Pro-171, Pro-185 to Lys-198.	AR051: 50, AR050: 37, AR054: 35 H0179: 2, L0519: 2, H0265: 1, H0264: 1, L0541: 1, S0053: 1 and S0216: 1.		
HTOAI35	799686	6078	53 - 121	15830		H0264: 3		
HTOAI69	529555	6079	2 - 97	15831	Gln-3 to Asn-8, Glu-22 to Arg-27.	H0264: 2		
HTOAI93	751902	6080	47 - 235	15832		H0264: 2		
HTOAK34	966800	6081	918 - 1196	15833	Ser-67 to Trp-77.	AR089: 1, AR061: 1 L0766: 2, H0264: 1 and H0521: 1.		
HTOAK36	921745	6082	1 - 204	15834	Tyr-31 to Arg-40.	H0264: 2		
HTOAO19	954183	6083	81 - 164	15835		H0264: 2		
HTOAO75	530192	6084	23 - 214	15836	Asn-6 to Phe-16.	H0264: 2		
HTOAT80	530186	6085	3 - 284	15837		H0264: 2		
HTOAU62	738214	6086	3 - 398	15838		H0416: 1 and H0264: 1.		
HTOAU94	620370	6087	10 - 195	15839		H0264: 1, S0002: 1 and H0521: 1.		
HTOAW19	530114	6088	85 - 180	15840	Leu-14 to Glu-24.	H0264: 2		
HTOAW26	530116	6089	2 - 61	15841		H0264: 2		
HTOAW37	507322	6090	177 - 392	15842		H0264: 2 and L0439: 1.		
HTOBA06	960618	6091	3 - 395	15843	Gly-1 to Tyr-9, His-37 to Pro-42, Lys-125 to Pro-131.	H0581: 1, H0272: 1 and S0428: 1.		
HTOBA10	839919	6092	1 - 168	15844	His-40 to Arg-52.	H0272: 1 and H0445: 1.		
HTOBE15	715538	6093	12 - 176	15845	Ser-6 to His-12, Lys-31 to Ser-36.	H0264: 1 and H0272: 1.		

HTOBF03	925407	6094	57 - 146	15846			H0272: 2		
HTOBF07	954184	6095	10 - 141	15847	Pro-14 to Gly-35.		H0272: 2		
HTOBF35	530325	6096	6 - 314	15848	Lys-10 to Gly-16.		H0272: 2		
HTOBF27	682263	6097	2 - 250	15849	Arg-16 to Thr-22.		H0272: 1, S0002: 1 and L0748: 1.		
HTOBF70	740977	6098	27 - 146	15850	Ser-3 to Pro-9.		H0272: 1 and H0488: 1.		
HTOBF011	966734	6099	32 - 169	15851			H0063: 1 and H0272: 1.		
	966776	9603	356 - 192	19355					
HTOCF92	530009	6100	199 - 411	15852	Arg-33 to Lys-38, Pro-60 to Lys-67.		H0272: 2 and L0748: 1.		
HTOCK26	523838	6101	2 - 187	15853	Ser-29 to Gln-34.		H0272: 2 and L0791: 1.		
HTODB23	530149	6102	2 - 142	15854			H0264: 2		
HTODC33	921426	6103	1 - 549	15855			L0766: 6, L0754: 4, L0779: 4, H0264: 2, L0747: 2 and L0777: 1.		
HTODE04	927826	6104	3 - 209	15856			H0264: 3		
HTODE78	530397	6105	20 - 160	15857	Asn-1 to Glu-7, Val-40 to Glu-47.		H0264: 2		
HTODG07	880911	6106	90 - 215	15858	Gly-1 to Ser-7.		H0264: 2		
HTODG10	968505	6107	38 - 157	15859	Glu-1 to Glu-10.		H0264: 2		
HTODG16	909952	6108	1 - 492	15860	Arg-80 to Lys-88, Ser-94 to Arg-103.		AR089: 22, AR061: 6 H0264: 2 and L0766: 1.		
HTODG47	799691	6109	48 - 221	15861	Pro-14 to Ala-19.		H0264: 3 and L0361: 1.		
HTODG55	852560	6110	3 - 194	15862	His-2 to Pro-12.		H0264: 2 and H0521: 1.		
HTODG58	869998	6111	3 - 122	15863	Ile-11 to Tyr-18, Met-29 to Gln-35.		H0264: 2		
HTODG60	558007	6112	19 - 216	15864	Thr-23 to Asn-34, Gln-53 to Phe-58.		H0264: 2		
HTODG83	676384	6113	1 - 135	15865	Arg-27 to Val-33.		H0264: 2		
HTODH04	925386	6114	107 - 286	15866	Pro-31 to Lys-36.		H0264: 2		
HTODH37	708892	6115	70 - 234	15867	Ser-27 to His-34.		S0114: 1 and H0264: 1.		
HTODL81	507295	6116	47 - 178	15868	Val-3 to Gln-8.		H0264: 2		
HTODL85	799701	6117	171 - 302	15869	Phe-38 to Leu-44.		H0264: 4 and H0179: 1.		
HTODM58	811293	6118	3 - 215	15870	Ser-1 to Asn-12.		H0264: 3.		
HTODN21	869967	6119	38 - 163	15871			H0264: 2		

HTODN27	684343	6120	183 - 326	15872			H0581: 1, H0264: 1 and H0521: 1.		
HTODN68	527862	6121	4 - 147	15873	Asp-35 to Ser-40.		H0179: 1 and H0264: 1.	Yq11	400003, 415000
HTOEA06	960551	6122	86 - 211	15874	Lys-8 to Phe-14.		H0264: 3		
HTOEA12	967754	6123	166 - 357	15875	Ala-37 to Met-44.		H0264: 2		
HTOEA25	523546	6124	40 - 96	15876	Thr-9 to Asn-14.		H0264: 2		
HTOEC81	529834	6125	48 - 167	15877	Arg-1 to Thr-18.		H0264: 2		
HTOEC94	529839	6126	213 - 302	15878	Ser-25 to Arg-30.		H0264: 2		
HTOED10	839798	6127	61 - 318	15879	Gln-19 to Leu-24, Ser-28 to Gly-35.		H0069: 1 and H0264: 1.		
HTOED61	742158	6128	214 - 339	15880			S0142: 2 and H0264: 1.		
HTOEG69	967562	6129	3 - 149	15881			H0264: 2		
HTOET10	968492	6130	2 - 109	15882			H0264: 2		
HTOEV37	774641	6131	31 - 141	15883	Val-21 to Lys-33.		S0114: 1 and H0264: 1.		
HTOEV40	529822	6132	286 - 414	15884			H0264: 2		
HTOEV50	529820	6133	77 - 220	15885			H0264: 2		
HTOEY72	659494	6134	136 - 255	15886			H0264: 2		
HTOFA04	845519	6135	1 - 129	15887			H0087: 1 and H0264: 1.		
	869987	9604	158 - 289	19356					
	927327	9605	458 - 129	19357	Ala-1 to Lys-9, Lys-22 to Lys-28, Lys-37 to Asp-43.				
HTOFB55	723256	6136	110 - 256	15888			H0264: 2		
HTOFB73	742153	6137	3 - 164	15889			H0264: 2		
HTOFC70	811291	6138	65 - 355	15890			H0264: 2		
HTOFD10	968469	6139	2 - 133	15891	Ile-20 to Asp-32.		H0264: 2		
HTOFD31	529674	6140	2 - 76	15892			S0114: 1 and H0264: 1.		
HTOFD57	529673	6141	101 - 304	15893			H0264: 2		
HTOFO05	932662	6142	3 - 98	15894	Pro-5 to Leu-16.		H0083: 1 and H0264: 1.		
HTOFO41	529617	6143	34 - 111	15895	Tyr-3 to Leu-11, Arg-14 to Glu-19.		H0264: 2		
HTOFQ48	720880	6144	125 - 316	15896	Thr-12 to Asn-21, Pro-39 to Gln-45.		H0318: 1 and H0264: 1.		
HTOFT22	939903	6145	1870 - 2187	15897	Thr-11 to Gly-24, Pro-27 to Asn-37,		AR061: 6, AR089: 2 H0264: 2		

					Glu-44 to Glu-49, Arg-69 to Arg-84.		
	963302	9606	750 - 905	19358			
H TOFT34	527144	6146	106 - 270	15898			AR089: 8, AR061: 5 H0264: 2 and L0367: 1.
H TOGA06	960554	6147	1 - 249	15899			H0264: 2
H TOGA25	529959	6148	37 - 156	15900			H0264: 2
H TOGA35	751989	6149	185 - 337	15901	Ala-11 to Thr-17.		L0750: 3, L0551: 2, L0748: 2, H0486: 1, L0455: 1, H0264: 1, S0002: 1, L0764: 1, L0791: 1 and L0740: 1. H0264: 1 and H0272: 1.
H TOGA51	530331	6150	6 - 122	15902	Glu-23 to Lys-29.		H0264: 2
H TOGB55	781591	6151	157 - 390	15903			H0264: 2
H TOGB92	529810	6152	40 - 132	15904	Lys-18 to Glu-24.		H0264: 2
H TOGC16	927835	6153	22 - 102	15905			H0264: 2
H TOGC20	960094	6154	191 - 334	15906	Thr-1 to Gly-13; Pro-26 to Leu-31.		H0318: 1 and H0264: 1.
H TOGD28	529806	6155	141 - 335	15907			H0264: 2
H TOGD43	650846	6156	2 - 172	15908	His-7 to Trp-12, Arg-15 to Trp-20, Tyr-22 to Trp-29.		H0264: 1 and H0445: 1.
H TOGD50	529805	6157	222 - 434	15909	Pro-19 to Gly-24, Ser-41 to Ser-46.		H0264: 2 and L0766: 1.
H TOGI75	869973	6158	101 - 307	15910			H0264: 2
H TOGI86	507294	6159	3 - 332	15911	His-1 to Cys-10.		H0264: 2
H TOGR50	529824	6160	139 - 231	15912			H0264: 2
H TOGR65	618316	6161	339 - 572	15913			L0749: 2, H0264: 1 and S0002: 1.
	869971	9607	292 - 624	19359			
	869972	9608	236 - 364	19360			
H TOGU30	961776	6162	13 - 105	15914	Phe-14 to Thr-24.		H0650: 1 and H0264: 1.
H TOHB03	924986	6163	2 - 193	15915			H0581: 1 and H0264: 1.
H TOHB42	714073	6164	361 - 158	15916			H0341: 1 and H0264: 1.
H TOHB66	966688	6165	559 - 768	15917	Pro-18 to Pro-27.		H0318: 4, L0748: 2, H0264: 1 and H0543: 1.

HTOHC78	577745	6166	18 - 239	15918	Ser-1 to Pro-7, Ala-14 to Thr-25, Pro-38 to Pro-44, Val-62 to Gly-73.	H0264: 2		
HTOHC84	537370	6167	69 - 266	15919	Cys-50 to Gly-56.	H0264: 2		
HTOHD27	799676	6168	3 - 128	15920		H0264: 2		
HTOHF53	531172	6169	1 - 129	15921		S0114: 1 and H0264: 1.		
HTOHG55	537366	6170	133 - 252	15922		H0264: 2		
HTOHJ60	740611	6171	110 - 193	15923		H0318: 1 and H0264: 1.		
HTOHL22	968308	6172	113 - 241	15924		H0264: 2		
HTOHL35	537364	6173	1 - 201	15925	Arg-8 to Val-18, Arg-30 to Cys-36.	AR061: 1, AR089: 0 H0264: 2		
HTOHM54	537363	6174	78 - 266	15926	Pro-6 to Pro-14.	H0264: 2		
HTOHN24	971728	6175	3 - 122	15927	Lys-26 to Arg-33.	H0264: 2		
HTOHN42	537362	6176	28 - 147	15928	Ser-11 to Leu-16, Leu-20 to Arg-25.	H0264: 2		
HTOHP13	530350	6177	4 - 417	15929	Pro-11 to Ala-17.	H0264: 2, H0457: 1, H0271: 17q21 1 and H0543: 1.	109270, 109270, 109270, 109270, 109270, 113705, 113705, 144200, 148065, 148066, 148066, 148067, 148067, 148069, 148080, 154275, 168610, 171190, 176705, 185800, 200350, 221820, 232200, 249000, 252920, 253250, 600119, 600119, 601363, 601844	
HTOHS32	678071	6178	46 - 201	15930	Pro-20 to His-39, Pro-47 to Ser-52.	H0416: 1 and H0264: 1.		
HTOHS68	507136	6179	3 - 311	15931	Asp-7 to Lys-16.	H0264: 2		
HTOHU09	920734	6180	1 - 168	15932		H0264: 2 and S0116: 1.		
HTOHV29	527865	6181	2 - 151	15933	Pro-9 to Glu-14.	H0264: 2		

HTOHX74	507139	6182	1 - 246	15934	Lys-1 to Ala-11, Pro-26 to Lys-41.	H0264: 2		
HTOHZ61	537371	6183	274 - 405	15935	Asn-1 to Tyr-6.	H0264: 2		
HTOIA12	851032	6184	1 - 360	15936		H0457: 1 and H0264: 1.		
HTOIA68	584946	6185	2 - 139	15937	Leu-1 to Arg-8.	H0264: 2		
HTOIJ67	537354	6186	114 - 356	15938	Pro-24 to Asn-32, Ala-36 to Gln-43, Asp-48 to Ala-57, Pro-66 to Arg-71.	H0264: 2		
HTOIK06	954518	6187	34 - 210	15939		S0114: 1, H0318: 1 and H0264: 1.		
HTOIK08	959996	6188	238 - 483	15940	Pro-10 to Gln-17.	L0766: 2, H0306: 1 and H0264: 1.		
HTOIN17	537322	6189	1 - 276	15941	Gly-1 to Leu-6.	H0264: 2		
HTOIO29	506720	6190	63 - 230	15942		H0264: 2		
HTOIO36	537320	6191	92 - 244	15943	Leu-38 to Ser-43.	H0264: 2		
HTOIO79	537321	6192	1 - 174	15944	Gly-1 to Arg-9.	H0264: 2		
HTOIP32	869941	6193	207 - 470	15945		H0264: 2		
HTOIP53	557824	6194	122 - 289	15946		H0264: 2		
HTOIQ05	932440	6195	110 - 274	15947	Gly-2 to Lys-9, Asp-15 to Trp-20.	H0264: 2		
HTOIR12	537319	6196	229 - 80	15948		H0264: 2		
HTOIS27	485268	6197	282 - 413	15949	Gly-24 to Ser-29.	H0264: 1, H0543: 1 and H0423: 1.		
	934366	9609	188 - 292	19361	Ala-23 to Glu-28.			
HTOIT32	418666	6198	2 - 94	15950		H0271: 1 and H0264: 1.		
HTOIW02	920752	6199	1 - 243	15951	Ser-1 to Ser-11.	H0264: 2		
HTOIW40	669595	6200	113 - 271	15952		H0264: 1 and H0543: 1.		
HTOY09	836003	6201	40 - 258	15953	Cys-1 to Glu-7, Ser-25 to Ser-32.	H0556: 1, H0264: 1 and H0422: 1.		
HTOIZ34	707039	6202	107 - 241	15954	Ser-6 to Gly-12, Arg-40 to Ala-45.	H0264: 1, H0625: 1, L0666: 1 and L0740: 1.		
HTOJA65	456824	6203	213 - 353	15955	Leu-1 to His-6, Pro-11 to Trp-16.	H0556: 2, H0265: 1 and H0264: 1.		
HTOJA83	574764	6204	50 - 250	15956	Gln-25 to Arg-30,	H0264: 2		

HTOJA96	968510	6205	27 - 107	15957	Tyr-42 to Trp-50.	H0264: 2	
HTOJB59	574761	6206	176 - 316	15958	Gly-10 to Gly-15.	H0264: 2	
HTOJB67	726577	6207	245 - 466	15959	Ser-8 to Met-15, Gly-24 to Pro-29, Lys-63 to Ser-74.	H0445: 2 and H0264: 1.	
HTOJF65	715820	6208	89 - 262	15960		S0114: 1 and H0264: 1.	
HTOJG08	869926	6209	2 - 166	15961		H0264: 2	
HTOJH24	766963	6210	2 - 391	15962	Arg-43 to Trp-48.	H0341: 1, H0264: 1 and H0543: 1.	
HTOJH17	574735	6211	18 - 155	15963		H0264: 2, L0748: 1 and L0749: 1.	
HTOJK48	574348	6212	29 - 217	15964		H0264: 2	
HTOJK79	531320	6213	3 - 245	15965		S0114: 1 and H0264: 1.	
HTOJK84	952741	6214	7 - 201	15966	Gly-32 to Ile-37.	H0264: 1 and H0445: 1.	
HTOJL55	825165	6215	8 - 139	15967		S0114: 1 and H0264: 1.	
HTOJL71	574529	6216	23 - 133	15968		H0264: 2	
HTOJM06	936089	6217	396 - 644	15969	Ser-35 to Ala-48, Ser-73 to Gly-82.	H0264: 1, S0428: 1 and S0053: 1.	
HTOJM70	799689	6218	1 - 159	15970		H0264: 3	
HTOJS81	711021	6219	1 - 195	15971		H0556: 1 and H0264: 1.	
HTOJT90	921016	6220	148 - 369	15972	Leu-1 to Thr-6.	H0341: 2, H0264: 2, L0471: 1 and H0542: 1.	
HTSAA22	415775	6221	2 - 181	15973		H0402: 1 and H0087: 1.	
HTSEU58	521995	6222	86 - 271	15974	Trp-10 to Lys-19, Gln-21 to Thr-48.	H0318: 1, H0087: 1 and L0747: 1.	
HTSFZ77	935620	6223	105 - 266	15975	Pro-29 to Asn-34, Glu-43 to Lys-49.	H0402: 3 and H0087: 1.	
HTSGB93	526625	6224	89 - 277	15976		H0087: 4 and L0752: 1.	121700, 122000, 188040
HTSGM65	576062	6225	151 - 309	15977		H0087: 2	
HTSGW24	971724	6226	295 - 609	15978	Ser-35 to Trp-44.	H0087: 1 and S0052: 1.	
HTSHA61	960474	6227	282 - 97	15979	Ala-47 to Phe-52.	H0087: 1 and H0116: 1.	
HTSHD86	773726	6228	182 - 499	15980		H0063: 1 and H0087: 1.	
HTSHF47	720403	6229	99 - 326	15981	Glu-1 to Pro-16.	H0486: 1 and H0087: 1.	

HTSHM38	972248	6230	2 - 604	15982	Asn-6 to Ser-15, Pro-29 to Arg-42, Pro-91 to Gln-108, Lys-123 to Arg-133, Ile-157 to Phe-168, Gln-171 to Val-178, Gly-185 to Pro-197.	AR051: 26, AR054: 20, AR050: 18, AR089: 6, AR061: 2 H0087: 1 and H0264: 1.		
HTUAA40	522671	6231	190 - 330	15983		H0185: 1 and S0052: 1.		
HTUAA86	522076	6232	19 - 96	15984	Val-1 to Thr-11.	H0185: 2 and L0764: 1.		
HTWAB64	522058	6233	2 - 151	15985	Ile-1 to Ile-6.	H0187: 1 and H0576: 1.		
HTWAH16	880725	6234	139 - 243	15986		S0114: 1 and H0187: 1.		
HTWAH51	614968	6235	60 - 167	15987	Lys-16 to Lys-21.	H0187: 1 and H0576: 1.		
HTWAM50	753217	6236	2 - 232	15988		H0341: 1 and H0187: 1.		
HTWBD74	716756	6237	3 - 173	15989	Pro-1 to Gly-10, Pro-17 to Phe-24, Thr-33 to Val-45.	S0002: 1 and H0436: 1.		
HTWBE77	781306	6238	531 - 719	15990		H0436: 1, L0731: 1 and H0445: 1.		
HTWBF61	579041	6239	62 - 187	15991		S0114: 1 and H0436: 1.		
HTWBF65	576623	6240	114 - 605	15992	Gln-59 to Leu-65.	H0341: 1 and H0436: 1.		
HTWBF82	854019	6241	2 - 217	15993		H0436: 2		
HTWBG40	711271	6242	42 - 329	15994	Cys-7 to Ser-13.	H0436: 1, L0748: 1 and H0422: 1.		
HTWBH73	708331	6243	32 - 211	15995	Ser-6 to Asp-12.	H0436: 2		
HTWBJ15	842014	6244	3 - 314	15996	Asp-1 to His-6.	L0596: 2, H0436: 1, H0445: 1 and H0543: 1.		
HTWBJ71	935647	6245	115 - 228	15997	Thr-6 to Gln-12, Glu-16 to Cys-25, Pro-28 to Leu-34.	H0436: 2		
HTWBL88	784364	6246	2 - 178	15998	His-21 to Glu-27, Gly-49 to Lys-59.	H0402: 1 and H0436: 1.		
HTWBN85	577510	6247	1 - 81	15999		S0114: 1 and H0436: 1.		
HTWBO55	732182	6248	385 - 525	16000		H0436: 2 and L0439: 2.		
HTWBR04	787303	6249	3 - 317	16001		H0581: 1 and H0436: 1.		
HTWBR01	578678	6250	1 - 102	16002	Arg-12 to Ser-33.	H0436: 2		
HTWCA19	582498	6251	131 - 436	16003		S0002: 1 and H0436: 1.		



HTWCA76	770109	6252	3 - 149	16004	Phe-40 to Phe-45.	S0218: 1 and H0436: 1.		
HTWCD27	658018	6253	1 - 186	16005	His-4 to Glu-27.	H0318: 1 and H0436: 1.		
HTWCD40	670812	6254	166 - 348	16006		H0436: 2		
HTWCE72	575962	6255	150 - 272	16007	Gly-3 to Phe-11, Pro-13 to Lys-38.	H0436: 2		
HTWCF06	935641	6256	195 - 371	16008	Gln-17 to Ala-22.	H0306: 1 and H0436: 1.		
HTWCF25	924008	6257	1 - 219	16009	Pro-18 to Lys-25.	H0436: 4		
HTWCF94	747197	6258	132 - 347	16010	Ser-1 to Pro-7, Pro-45 to Gly-54, His-58 to Ser-67.	H0436: 2		
HTWCG45	548176	6259	1 - 165	16011	Lys-17 to Thr-26.	S0278: 1 and H0436: 1.	6q14	136550, 203310, 269920, 602772
HTWCG65	869547	6260	115 - 312	16012	Lys-31 to Lys-47.	AR089: 1, AR061: 0 H0650: 1 and H0436: 1.		
HTWCG69	575950	6261	3 - 92	16013	Ala-9 to Ala-17.	S0053: 1 and H0436: 1.		
HTWCJ42	713022	6262	1 - 162	16014		H0436: 2		
HTWCK07	953482	6263	204 - 425	16015		S0114: 1 and H0436: 1.		
HTWCL29	740327	6264	2 - 79	16016	Ala-3 to Lys-13.	H0521: 1 and H0436: 1.		
HTWCM36	971129	6265	156 - 380	16017	Ser-2 to Ser-7.	H0305: 2, L0766: 2, H0436: 2, L0777: 2 and L0748: 1.		
HTWCM56	662321	6266	352 - 525	16018	Asn-1 to Gln-12.	S0142: 1 and H0436: 1.		
HTWCN33	577494	6267	230 - 475	16019	Ser-15 to Lys-20.	H0265: 1 and H0436: 1.		
HTWCN83	573580	6268	2 - 280	16020		H0305: 5 and H0436: 1.		
HTWCR25	575959	6269	138 - 338	16021		H0436: 2		
HTWCS11	967190	6270	94 - 204	16022		H0436: 2		
HTWCT42	713870	6271	1 - 150	16023		H0436: 2		
HTWCT61	575975	6272	86 - 232	16024		H0402: 2 and H0436: 1.		
HTWCX32	669745	6273	2 - 97	16025		H0436: 2, L0021: 1 and L0766: 1.		
HTWCY05	920337	6274	1 - 150	16026		H0436: 2		
HTWCY69	869553	6275	100 - 369	16027	Gln-26 to Lys-34.	H0436: 2		
HTWDB72	835624	6276	197 - 376	16028	Tyr-40 to Asp-45, Asn-52 to Ser-57.	H0436: 2		
HTWDF82	921697	6277	3 - 233	16029	Phe-10 to Tyr-22, Arg-45 to Gly-57.	H0179: 1 and H0436: 1.		

HTWDH14	669560	6278	3 - 338	16030	Asp-68 to Asn-74. Ala-7 to Ser-12, Tyr-42 to Lys-50, Asn-62 to Ile-67, Thr-100 to Val-105.	H0521: 2, S0114: 1, L0654: 1, H0522: 1 and H0436: 1.		
HTWDH75	767368	6279	138 - 302	16031		H0556: 1 and H0436: 1.		
HTWDM43	715352	6280	147 - 314	16032	Pro-43 to Ser-51.	S0474: 2, H0436: 1, L0749: 1 and H0542: 1.		
HTWDN01	916680	6281	75 - 221	16033	Glu-37 to Ala-42.	H0436: 2		
HTWDN17	664115	6282	1 - 345	16034	Asn-50 to Gly-55, Gln-69 to Leu-74.	H0436: 1 and H0543: 1.		
HTWDQ60	575939	6283	1 - 105	16035		H0436: 2		
HTWDS35	697825	6284	3 - 374	16036	Glu-15 to Tyr-24, Lys-29 to Lys-34, Leu-38 to His-43, Arg-47 to Glu-57, Ser-65 to Gln-78, Arg-86 to Ala-91, Leu-95 to Gln-100, Gln-107 to Glu-115.	L0803: 1, H0521: 1 and H0436: 1.		
HTWEA61	965453	6285	3 - 368	16037	Glu-24 to Thr-30, Ser-39 to Pro-44.	H0436: 2		
HTWEC63	735003	6286	2 - 136	16038	Gln-1 to Glu-21.	S0114: 1 and H0436: 1.		
HTWED17	663714	6287	257 - 370	16039		S0218: 1, H0370: 1 and H0436: 1.		
HTWED28	686598	6288	269 - 400	16040	Arg-11 to Leu-19.	H0581: 1 and H0436: 1.		
HTWEG12	970538	6289	3 - 167	16041	Arg-39 to Gly-49.	H0436: 2		
HTWEH16	661860	6290	3 - 227	16042	Ser-42 to Ser-52, His-60 to Arg-70.	H0341: 1 and H0436: 1.		
HTWEJ14	792648	6291	171 - 371	16043	Phe-11 to Cys-17.	H0436: 2		
HTWEM37	449136	6292	3 - 260	16044	Pro-26 to Pro-36, Phe-54 to Gly-65.	H0264: 1 and H0436: 1.		
HTWEM63	745024	6293	346 - 77	16045		H0436: 1 and H0423: 1.		
HTWER78	836799	6294	16 - 378	16046	Arg-74 to Tyr-80.	H0486: 1 and H0436: 1.		
HTWES75	767257	6295	88 - 180	16047		H0436: 2		
HTWEU29	711673	6296	3 - 224	16048	Arg-56 to Ser-65.	L0439: 2, T0041: 1, H0436: 1q21-q22	104770, 107670,	

									1 and L0748: 1.		110700, 135940, 145001, 146790, 152445, 152445, 159001, 159440, 159440, 159440, 174000, 179755, 182860, 182860, 182860, 186780, 191030, 191315, 230800, 230800, 266200, 600897, 600923, 601105, 601412, 601652, 602491
HTWEX09	625458	6297	3 - 182	16049					Glu-1 to Ala-6.	H0436: 1 and H0444: 1.	
HTWEX18	666305	6298	210 - 353	16050						H0436: 1 and H0423: 1.	
HTWEY30	918641	6299	661 - 434	16051					Ser-18 to Phe-27, Ser-30 to Ser-40, Thr-50 to Lys-55.	H0436: 2 and L0751: 1.	
HTWFB37	708908	6300	3 - 164	16052					Thr-45 to Gly-53.	H0306: 1 and H0436: 1.	
HTWFB75	767253	6301	85 - 243	16053					Asp-6 to Gly-12, Gln-23 to Gln-29, Arg-37 to Gly-49.	S0116: 1, H0421: 1 and H0436: 1.	
HTWFF46	869499	6302	2 - 205	16054					Lys-25 to Trp-31, Arg-43 to Pro-53, Pro-59 to Lys-64.	H0436: 5	
HTWFG44	935270	6303	224 - 478	16055					Glu-31 to Gly-38, Ser-45 to Arg-50, Gly-56 to Ile-62, Pro-70 to Cys-81.	H0457: 1 and H0436: 1.	
HTWFI19	668579	6304	216 - 332	16056					Pro-13 to Val-18, Pro-20 to Trp-29.	H0436: 4	
HTWFK15	869498	6305	139 - 282	16057						H0436: 2	
HTWFM20	917272	6306	195 - 536	16058					Pro-77 to Thr-86.	S0114: 1, H0063: 1 and H0436: 1.	
HTWFN64	757593	6307	105 - 278	16059						H0402: 1 and H0436: 1.	

HTWFO63	658473	6308	75 - 131	16060		H0542: 2, H0402: 1, H0318: 1, H0436: 1, L0753: 1 and L0758: 1.		
HTWFP14	869489	6309	3 - 209	16061	His-9 to Gly-14.	H0436: 2		
HTWFP33	916562	6310	79 - 309	16062	Arg-27 to Leu-33, Val-51 to Asp-56, Arg-64 to Gly-72.	H0402: 1, H0264: 1 and H0436: 1.		
HTWFP53	721768	6311	272 - 400	16063	Pro-1 to Gly-6.	H0402: 1 and H0436: 1.		
HTWFR17	663697	6312	20 - 253	16064		H0264: 1 and H0436: 1.		
HTWJA24	954881	6313	281 - 538	16065		H0576: 2, S0002: 1 and L0599: 1.		
HTWJA59	812705	6314	130 - 279	16066	Gly-30 to Gln-37.	H0576: 2		
HTWJA83	780990	6315	70 - 216	16067	His-25 to Asn-35.	H0576: 2		
HTWJA95	796259	6316	139 - 258	16068	Met-6 to Asn-11, Pro-34 to Gln-40.	H0576: 2		
HTWJC43	715081	6317	49 - 207	16069	Ser-11 to Gly-20.	H0583: 1 and H0576: 1.		
HTWJC75	767134	6318	3 - 77	16070	Glu-3 to Glu-13, Lys-15 to Asn-22.	H0576: 2	2	
HTWJC85	757125	6319	200 - 334	16071	Arg-27 to Tyr-32.	H0556: 1 and H0576: 1.		
HTWJF59	693116	6320	197 - 361	16072	Met-1 to Gly-25, Tyr-27 to Met-39.	H0576: 1 and H0444: 1.		
HTWJF66	576164	6321	204 - 443	16073	Gln-5 to Phe-10.	H0255: 1, H0576: 1 and H0423: 1.		
HTWJF95	745182	6322	78 - 248	16074		H0402: 1, H0576: 1 and H0423: 1.		
HTWJH57	812698	6323	68 - 265	16075	Trp-4 to Ser-9, Pro-54 to Pro-61.	H0576: 1 and H0445: 1.		
HTWJL91	789487	6324	243 - 368	16076		S0114: 1, H0576: 1 and L0750: 1.		
HTWJM05	850055	6325	68 - 250	16077		H0402: 2 and H0576: 1.		
HTWJO45	717592	6326	43 - 192	16078	Thr-25 to Thr-32, Arg-43 to Lys-49.	H0576: 2 and L0776: 1.		
HTWJQ19	668466	6327	253 - 342	16079	Pro-23 to Val-29.	H0254: 1, H0576: 1 and H0422: 1.		
HTWJY82	698335	6328	1 - 93	16080		S0114: 1 and H0576: 1.		
HTWKG30	691882	6329	21 - 131	16081	Pro-1 to Trp-6.	H0589: 1 and H0576: 1.		

HTWKN53	728014	6330	3 - 269	16082	Lys-12 to Met-24, Pro-43 to Asp-50, Glu-63 to Ser-68, Pro-73 to Ser-88.	H0576: 2		
HTWK161	709451	6331	44 - 118	16083		H0576: 2		
HTWKX27	574092	6332	29 - 265	16084	Leu-16 to Val-21.	S0053: 1, H0576: 1 and L0748: 1.		
HTWKZ04	614980	6333	109 - 294	16085	Phe-5 to Ile-11.	S0426: 1 and H0576: 1.		
HTWKZ17	529749	6334	234 - 365	16086		H0265: 2 and H0576: 1.		
HTWLD37	841951	6335	89 - 400	16087		S0053: 1 and H0576: 1.		
HTWLG13	656772	6336	2 - 160	16088	Gln-43 to Gly-53.	H0255: 1 and H0576: 1.		
HTWLG76	795694	6337	267 - 539	16089		S0182: 1 and H0576: 1.		
HTXAK52	869460	6338	7 - 264	16090	Arg-1 to Gly-14.	H0265: 1 and H0318: 1.		
HTXAK78	530137	6339	174 - 347	16091	Leu-30 to Thr-35.	H0265: 2		
HTXAO23	676386	6340	15 - 92	16092		H0265: 1 and S0114: 1.		
HTXBF75	963029	6341	98 - 277	16093	Ser-23 to Gln-40.	H0265: 1 and H0556: 1.		
HTXBH24	418592	6342	2 - 151	16094		H0265: 2		
HTXBI36	529759	6343	17 - 232	16095	Ser-13 to Leu-19.	H0265: 2		
HTXBI92	706472	6344	227 - 361	16096		L0749: 2, H0265: 1, H0402: 1 and L0667: 1.		
HTXBK75	869401	6345	1 - 123	16097		H0265: 2		
HTXBN83	781443	6346	3 - 101	16098		H0265: 1 and S0218: 1.		
HTXBO11	967750	6347	176 - 400	16099	Lys-25 to Pro-31.	H0265: 1 and H0421: 1.		
HTXBO21	869461	6348	2 - 193	16100		H0265: 1 and H0542: 1.		
HTXBO51	970855	6349	146 - 592	16101	Leu-1 to Gln-19, Ala-84 to Gly-99, Pro-128 to Arg-142.	L0777: 2, H0265: 1, H0556: 1, H0255: 1, L0662: 1, L0375: 1, L0378: 1 and L0519: 1.		
HTXBX49	529662	6350	91 - 195	16102		H0265: 2		
HTXBX77	529661	6351	120 - 353	16103	Ser-59 to Gln-64.	H0265: 2		
HTXCB32	529615	6352	199 - 402	16104	Pro-21 to Lys-32.	H0265: 2 and L0596: 1.		
HTXCL28	952022	6353	56 - 175	16105		H0265: 2 and H0556: 1.		
HTXCU76	765655	6354	188 - 589	16106	Cys-122 to His-131.	H0265: 1, H0556: 1, H0457: 1 and L0766: 1.		
HTXCW16	522365	6355	50 - 265	16107	Val-10 to Cys-17.	H0265: 2		

HTXCW27	491257	6356	378 - 166	16108			H0265: 1 and H0522: 1.		
HTXCX05	932476	6357	148 - 303	16109			H0265: 1 and H0556: 1.		
HTXCX16	537413	6358	1 - 231	16110		Arg-12 to Gly-21, Ala-23 to His-32, Ala-59 to Gln-71.	H0265: 2		
HTXCX84	924996	6359	2 - 241	16111			H0265: 2		
HTXCZ16	537485	6360	213 - 416	16112		Glu-14 to Asp-19.	H0265: 2		
HTXDG37	968886	6361	71 - 466	16113		Arg-5 to Gly-13.	AR051: 14, AR050: 13 H0265: 1, L0637: 1, L0766: 1 and H0521: 1.		
HTXDI51	537474	6362	86 - 235	16114		Ser-28 to Val-34, Leu-43 to Arg-48.	H0265: 2		
HTXDO50	537487	6363	120 - 314	16115			H0265: 2		
HTXDQ25	869369	6364	1 - 306	16116		Ser-4 to Ser-15.	H0265: 1 and H0556: 1.		
HTXDS80	869435	6365	2 - 82	16117		Pro-1 to Lys-9.	H0265: 2		
HTXDW14	966588	6366	1145 - 432	16118		Tyr-17 to Asp-22, Pro-75 to Ser-81.	H0265: 1, H0583: 1 and L0741: 1.		
HTXDX61	784768	6367	1 - 423	16119		Arg-1 to Asp-16.	AR061: 6, AR089: 3 H0265: 1, H0264: 1, H0488: 1 and H0543: 1.		
HTXDX82	931113	6368	307 - 513	16120		Leu-20 to His-31.	H0265: 1 and H0556: 1.		
HTXDZ01	921486	6369	62 - 223	16121			H0265: 2 and S0134: 1.		
HTXEA41	974530	6370	198 - 422	16122		Thr-1 to Trp-10, Phe-18 to Arg-25.	H0265: 2		
HTXEA62	812833	6371	22 - 294	16123			H0265: 1 and S0428: 1.		
HTXEC53	529755	6372	118 - 369	16124		Thr-1 to Asn-7, Phe-21 to Ser-27.	H0265: 2 and L0589: 1.		
HTXEE70	537405	6373	2 - 157	16125		Pro-26 to Pro-37.	H0265: 1 and H0264: 1.		
HTXEM54	764221	6374	109 - 261	16126		Arg-4 to Pro-11, Thr-45 to Glu-50.	H0265: 2	17p13	138190, 254210, 271900, 600179, 600977, 601202, 601777
HTXBP20	537483	6375	3 - 194	16127		Gly-1 to Gln-9, Trp-11 to Arg-21, Gly-26 to Lys-32, Ala-38 to Phe-50.	H0265: 2		

HTXEP49	722181	6376	191 - 400	16128		L0589: 2, H0265: 1 and H0090: 1.		
HTXEP76	527697	6377	114 - 365	16129		H0265: 1, H0305: 1 and S0426: 1.		
HTXEQ05	932471	6378	65 - 235	16130		H0265: 2 and H0305: 1.		
HTXET61	537471	6379	3 - 191	16131		H0265: 2		
HTXET67	783784	6380	68 - 211	16132		H0265: 1 and H0556: 1.		
HTXET75	664468	6381	1 - 174	16133		H0265: 1 and S0053: 1.		
HTXEW14	932437	6382	37 - 219	16134	Lys-5 to Ala-11.	H0265: 2		
HTXFB03	924995	6383	176 - 316	16135	Pro-15 to Gly-32.	H0265: 2, S0134: 1, S0474: 1, L0662: 1, H0576: 1 and L0599: 1.		
HTXFB78	869408	6384	3 - 263	16136	Pro-34 to Phe-40.	H0265: 1 and H0556: 1.		
HTXFB95	537399	6385	3 - 332	16137	Trp-21 to Gln-26, Thr-37 to Ser-43, Glu-78 to Cys-84.	H0265: 2		
HTXFC07	918644	6386	254 - 430	16138	Gln-27 to Arg-32.	H0265: 1, H0556: 1 and L0749: 1.		
HTXFD75	537401	6387	94 - 231	16139	Ser-23 to Thr-28.	H0265: 2		
HTXFE47	790855	6388	189 - 464	16140		H0556: 20, H0265: 8, H0638: 1, H0660: 1, H0521: 1 and L0749: 1.		
HTXFF04	615593	6389	399 - 653	16141	Lys-18 to Pro-26.	H0265: 1, H0318: 1 and L0748: 1.		
HTXFF66	973429	6390	91 - 438	16142	Pro-27 to Ser-32, Glu-41 to Ser-47, His-85 to Trp-90, Glu-92 to Val-111.	H0265: 2 and H0556: 1.		
HTXFF91	780083	6391	145 - 258	16143		H0265: 2		
HTXFI58	557838	6392	2 - 151	16144	Thr-8 to Trp-19, Glu-24 to Tyr-29.	H0265: 2		
HTXFK45	523385	6393	108 - 218	16145	Tyr-12 to Tyr-24.	H0265: 2		
HTXFN69	869397	6394	3 - 476	16146	Val-7 to Phe-14, Glu-32 to Glu-39.	H0265: 1, H0556: 1 and H0607: 1.		
HTXFAQ65	926534	6395	442 - 549	16147	Asp-9 to Lys-14.	H0265: 1 and H0370: 1.		
HTXFS95	796025	6396	23 - 325	16148	Pro-22 to Val-30.	H0265: 1, H0556: 1 and		

HTXFT03	924952	6397	2 - 100	16149		S0216: 1.		
HTXFT60	923937	6398	2 - 244	16150	Ala-1 to Cys-9, Cys-13 to Gly-18.	H0556: 7, H0265: 1 and L0748: 1.		
HTXFT22	537491	6399	167 - 322	16151		H0265: 1 and H0556: 1.		
HTXGB20	933878	6400	1 - 93	16152		H0265: 2		
HTXGB65	577711	6401	182 - 448	16153	Met-26 to Pro-39.	H0305: 2, H0265: 1, H0589: 1 and L0592: 1.		
HTXGD30	529724	6402	63 - 185	16154	Gly-5 to Leu-12.	H0265: 2 and H0556: 1.		
HTXGL73	529745	6403	15 - 242	16155		H0265: 2 and H0556: 2.		
HTXGN76	527016	6404	246 - 500	16156		H0265: 2 and H0318: 1.		
HTXGO74	869391	6405	1 - 84	16157		H0265: 2		
HTXGQ37	575461	6406	49 - 306	16158	Gly-40 to Lys-46.	H0265: 1 and S0114: 1.		
HTXHA16	661818	6407	46 - 351	16159	Gly-17 to Gln-23.	H0265: 2		
HTXHD24	727469	6408	53 - 274	16160		H0265: 2 and H0556: 1.		
HTXJA66	698461	6409	26 - 238	16161	Lys-41 to Leu-51.	H0265: 1 and H0556: 1.		
HTXJB15	660059	6410	131 - 277	16162		H0556: 2		
HTXJB35	707768	6411	43 - 348	16163	Gly-60 to Gly-67.	H0556: 1, H0625: 1, L0603: 1 and L0697: 1.		
HTXJC65	666565	6412	1 - 177	16164	Thr-11 to Tyr-19, Phe-32 to Phe-38.	H0556: 1, L0520: 1, L0794: 1 and H0422: 1.		
HTXJE76	745813	6413	166 - 318	16165		H0265: 1 and H0556: 1.		
HTXJF30	692607	6414	106 - 456	16166		H0556: 1, H0421: 1 and L0766: 1.		
HTXJG06	933230	6415	161 - 379	16167	Lys-1 to Gly-20, Leu-31 to Phe-36, Met-39 to Gly-48, Gln-57 to Arg-67.	H0543: 2, H0265: 1, H0556: 1 and H0423: 1.		
HTXJG19	974010	6416	213 - 335	16168		H0265: 1 and H0556: 1.		
HTXJG23	675315	6417	265 - 414	16169	Ser-24 to Lys-31, Val-45 to Ser-50.	H0556: 3		
HTXJG53	752160	6418	2 - 307	16170	Gly-19 to Gly-24, Ser-75 to Gly-83.	L0742: 2, H0556: 1, H0255: 1 and L0754: 1.		
HTXJH73	582143	6419	152 - 304	16171	Val-37 to Glu-42.	H0265: 1 and H0556: 1.		



HTXJL68	912611	6420	1 - 297	16172	Ile-2 to Cys-14, Asp-38 to Leu-43.	H0556: 2		
HTXJJ55	959169	6421	61 - 288	16173		H0556: 2		
HTXJK23	675782	6422	77 - 340	16174	Pro-7 to Pro-14, Pro-55 to Ser-61, Gly-70 to Asp-76.	H0556: 1 and S0002: 1.		
HTXJL01	916254	6423	116 - 334	16175		S0052: 3, H0556: 1 and L0777: 1.		
HTXJL02	919691	6424	259 - 483	16176		H0556: 1, H0650: 1 and L0759: 1.		
HTXJM73	783572	6425	1 - 138	16177	Gly-3 to Pro-11.	H0556: 2		
HTXJN04	566887	6426	298 - 684	16178	Ser-41 to Ser-49, Gly-77 to Arg-83, Arg-91 to Arg-96.	AR051: 46, AR050: 46, AR054: 28 H0556: 2 and H0265: 1.		
HTXJN68	752940	6427	79 - 288	16179	Gln-13 to Thr-18.	H0556: 1 and S0002: 1.		
HTXJO34	703973	6428	82 - 225	16180	Arg-8 to Asp-17.	H0265: 1 and H0556: 1.		
HTXJO61	663153	6429	2 - 361	16181	Pro-20 to Arg-28.	H0556: 2		
HTXJO85	869123	6430	24 - 341	16182	Arg-52 to Ser-57, Gly-67 to Cys-78.	H0556: 2 and L0599: 1.		
HTXJP28	974315	6431	35 - 355	16183		H0265: 1, H0556: 1 and H0635: 1.		
HTXJQ73	719077	6432	373 - 513	16184	Ile-7 to Ser-12.	H0556: 1 and S0052: 1.		
HTXJR67	739586	6433	3 - 182	16185		H0265: 1 and H0556: 1.		
HTXJS64	746481	6434	430 - 570	16186	Gln-5 to Arg-12, Arg-16 to Cys-27.	H0556: 1, H0581: 1 and H0445: 1.		
HTXJV49	867083	6435	235 - 726	16187	Leu-21 to Glu-32, Gly-39 to Ser-63.	H0265: 1 and H0556: 1.		
HTXJW56	859854	6436	2 - 295	16188	Lys-1 to Thr-10.	H0556: 1 and S0216: 1.		
HTXJY51	872233	6437	8 - 229	16189	Lys-1 to His-7, Cys-37 to Arg-43.	H0556: 1, S0052: 1 and H0521: 1.		
HTXKB42	841986	6438	135 - 326	16190	Lys-19 to Thr-30.	H0556: 2		
HTXKC23	529756	6439	90 - 233	16191		H0556: 4, H0265: 2 and L0601: 1.		
HTXKD62	743435	6440	1 - 285	16192	Pro-10 to Lys-16, Asn-22 to Pro-33.	H0265: 1 and H0556: 1.		
HTXKH47	720186	6441	202 - 330	16193		H0556: 2		

HTXKJ93	796245	6442	1 - 264	16194	Cys-9 to Gly-14.	H0265: 1, H0556: 1 and L0748: 1.	12	
HTXKJ55	671285	6443	121 - 315	16195	His-2 to His-7.	H0265: 1, H0556: 1 and L0543: 1.		
HTXKJ58	574788	6444	1 - 486	16196	Arg-1 to Leu-11, Ser-54 to Val-59, Gly-61 to Tyr-67, Pro-76 to Pro-94, Glu-99 to Ala-104.	H0271: 7, H0556: 1 and H0416: 1.		
HTXKJ89	767234	6445	203 - 385	16197	Thr-7 to Trp-15, Pro-19 to Ile-25, Gly-42 to Val-47.	H0556: 2		
HTXKJ95	795788	6446	43 - 234	16198	Pro-42 to Arg-47.	H0556: 2		
HTXKK62	751050	6447	3 - 347	16199		H0556: 1, S0278: 1, L0805: 1 and H0422: 1.	12q22	147440, 201470, 235800, 273300
HTXKM25	664886	6448	2 - 175	16200	Glu-1 to Trp-13, His-36 to Arg-41.	H0265: 1 and H0556: 1.		
HTXKM84	782951	6449	31 - 216	16201		H0265: 1 and H0556: 1.		
HTXKN90	787551	6450	190 - 309	16202		H0556: 3		
HTXKP42	713631	6451	321 - 452	16203	Lys-5 to Asn-11.	L0439: 4 and H0556: 2.		
HTXKQ25	934801	6452	137 - 364	16204	Glu-22 to His-37, Phe-67 to Arg-76.	H0556: 1, S0218: 1 and L0754: 1.		
HTXKQ55	947789	6453	3 - 305	16205	Asp-21 to Lys-26.	AR061: 2, AR089: 2 H0265: 1 and H0556: 1.	13q12	121011, 121011, 129500, 253700, 601885, 602221
HTXKS02	919676	6454	84 - 293	16206		H0556: 2		
HTXKU69	754404	6455	42 - 410	16207	Arg-7 to Ala-19.	H0556: 2 and L0757: 1.		
HTXKV16	869348	6456	221 - 376	16208	Arg-1 to Thr-10, Met-25 to Asp-39.	H0556: 2		
HTXKV38	918567	6457	7 - 192	16209		H0556: 3 and H0445: 1.		
HTXKZ89	786409	6458	186 - 305	16210		H0063: 2 and H0556: 1.		
HTXLA63	917316	6459	140 - 409	16211	Leu-1 to Ala-6, Ser-48 to Lys-53.	H0556: 1, S0114: 1 and S0116: 1.		
HTXLD06	934555	6460	243 - 491	16212	Tyr-37 to Gly-43, Arg-45 to Val-52, Lys-63 to Gly-70.	H0556: 2 and S0052: 1.		

HTXLD68	752484	6461	3 - 272	16213	His-7 to Gly-17, Glu-23 to Ile-31, Ala-38 to Phe-43.	H0265: 1, H0556: 1 and H0436: 1.		
HTXLE37	790392	6462	22 - 228	16214		H0265: 1, H0556: 1 and L0545: 1.		
HTXLE56	861983	6463	350 - 535	16215	Lys-14 to Ser-19, Gln-36 to Arg-43.	H0556: 1, H0300: 1 and H0179: 1.		
HTXLE75	766798	6464	404 - 670	16216	Thr-1 to Lys-10, Glu-36 to Cys-50.	H0556: 1, H0264: 1, L0804: 1 and H0445: 1.		
HTXLE79	774125	6465	76 - 420	16217	Trp-29 to Arg-35.	H0265: 1 and H0556: 1.		
HTXLF08	958421	6466	3 - 119	16218	Ala-6 to Arg-11.	H0556: 1, L0665: 1, L0750: 1 and H0445: 1.		
HTXLG57	790610	6467	1 - 306	16219	Arg-28 to Gln-35, Thr-44 to Lys-51, Lys-55 to Gly-61.	H0556: 1 and H0090: 1.		
HTXLG64	974598	6468	392 - 667	16220		H0265: 2 and H0556: 1.		
HTXLH60	869336	6469	275 - 421	16221		H0556: 2		
HTXLI65	974018	6470	277 - 456	16222		H0556: 2 and H0265: 1.		
HTXLI91	787577	6471	178 - 381	16223	Gln-29 to Gln-35, Ser-58 to Gln-67.	H0556: 2		
HTXLJ70	756679	6472	401 - 631	16224	Arg-36 to Ala-42.	H0556: 1 and H0271: 1.		
HTXLK35	840283	6473	249 - 455	16225		L0766: 2, H0556: 1, H0656: 1, H0255: 1, L0740: 1, L0749: 1, H0444: 1 and L0592: 1.		
HTXLK95	795355	6474	161 - 286	16226	Arg-1 to Ser-15.	H0265: 1 and H0556: 1.		
HTXLL78	773071	6475	1 - 183	16227	Thr-24 to Gln-34.	H0556: 2		
HTXLL89	786475	6476	114 - 287	16228	Pro-41 to Thr-46.	H0556: 3 and H0265: 1.		
HTXLN72	951958	6477	3 - 158	16229		H0556: 3		
HTXLO02	918658	6478	126 - 356	16230		H0556: 2 and L0748: 1.		
HTXLO14	869332	6479	167 - 358	16231		H0556: 2		
HTXLP15	869202	6480	206 - 466	16232	Glu-27 to Met-32.	H0556: 4		
HTXLP18	973431	6481	67 - 279	16233	Glu-14 to His-21, His-36 to Lys-45.	H0556: 5 and H0265: 1.		
HTXLQ28	869331	6482	1 - 267	16234	Ser-8 to Asp-13, Gly-26 to Trp-32.	H0556: 2 and H0265: 1.		

HTXLT33	919761	6483	1 - 147	16235	Arg-44 to Leu-49.	H0556: 1 and H0543: 1.		
HTXLU64	783411	6484	63 - 266	16236	Ser-18 to Asp-24. Gln-9 to Phe-14, Asn-27 to Asn-32.	H0265: 1 and H0556: 1.		
HTXLU82	779215	6485	1 - 297	16237	Pro-33 to Ser-43, Glu-59 to Phe-64.	H0265: 1 and H0556: 1.		
HTXLV39	972762	6486	210 - 482	16238		H0556: 2 and S0114: 1.		
HTXLY02	866819	6487	185 - 379	16239	Pro-13 to Arg-18, Leu-39 to Asn-44, Ser-58 to Tyr-63.	H0556: 1 and S0114: 1.		
HTXMC82	779198	6488	181 - 525	16240	Gln-31 to Phe-36.	H0556: 2 and H0265: 1.		
HTXMH13	928105	6489	319 - 480	16241	Ala-1 to His-7.	H0265: 1 and H0556: 1.		
HTXMH80	775487	6490	528 - 803	16242		H0556: 1 and H0069: 1.		
HTXMI18	921101	6491	82 - 282	16243		H0556: 1 and T0041: 1.		
HTXMI62	870456	6492	1 - 402	16244	Arg-4 to Pro-13, Gly-45 to Val-52.	H0556: 2		
HTXMI03	923001	6493	141 - 350	16245		H0265: 1 and H0556: 1.		
HTXMI50	830027	6494	2 - 358	16246	Asp-1 to Glu-6, Ile-14 to Ala-21, Pro-49 to Phe-67, His-73 to Ser-98.	H0265: 2, H0556: 1 and L0748: 1.	Xq21	305450, 309600, 309605, 311360, 314580
HTXMO28	823172	6495	2 - 232	16247	Gln-7 to Ala-17.	H0556: 2 and L0589: 1.		
HTXMO81	869319	6496	210 - 536	16248		H0556: 2 and L0415: 1.		
HTXMP92	972759	6497	291 - 566	16249	Pro-10 to Asn-16.	H0556: 2 and H0265: 1.		
HTXMQ07	952206	6498	115 - 294	16250	Asp-1 to Asn-6.	H0556: 1, S0218: 1 and H0591: 1.		
HTXMT06	933376	6499	50 - 247	16251	Lys-61 to Ala-66.	H0265: 1 and H0556: 1.		
HTXMU10	961472	6500	2 - 100	16252	Ser-15 to Ala-20.	H0556: 2 and H0090: 1.		
HTXMX03	923005	6501	578 - 763	16253	Ser-22 to Lys-27.	H0556: 2, H0445: 2, L0748: 1 and H0444: 1.		
HTXMX32	789063	6502	3 - 212	16254	Glu-8 to Lys-13.	H0556: 1 and H0063: 1.		
HTXMX41	789332	6503	247 - 459	16255	Cys-10 to Ala-17, Thr-39 to Pro-45.	H0556: 1, H0063: 1, L0375: 1, L0750: 1 and L0758: 1.		
HTXMY15	780129	6504	253 - 501	16256	Glu-1 to Asn-9.	H0556: 2 and H0179: 1.		
HTXMY23	835044	6505	522 - 217	16257	Asp-19 to Val-24.	AR051: 38, AR050: 35,		

								AR054: 32 H0556: 1 and S0002: 1.		
	835045	9610	642 - 361	19362				H0556: 2		
HTXMZ91	789619	6506	26 - 148	16258			Ile-33 to Ser-40.	H0556: 3, H0583: 1 and H0625: 1.		
HTXND08	869311	6507	379 - 618	16259				H0556: 1 and S0114: 1.		
HTXND91	789706	6508	317 - 592	16260				H0556: 2 and H0265: 1.		
HTXNF56	974048	6509	125 - 373	16261				H0556: 2		
HTXNJ80	966045	6510	151 - 282	16262				H0556: 3		
HTXNM82	973993	6511	218 - 346	16263				H0556: 2		
HTXNN03	922997	6512	262 - 405	16264				H0556: 5, L0766: 2, H0265: 1, H0521: 1 and L0748: 1.		
HTXNN33	780965	6513	692 - 483	16265			Gly-5 to Leu-10.	H0556: 2		
HTXNO48	963444	6514	154 - 255	16266				H0556: 2		
HTXNO58	916249	6515	115 - 414	16267			Gln-17 to Glu-39, Gln-62 to Lys-67, Leu-71 to Gln-76.	H0556: 2		
HTXNQ06	934303	6516	157 - 288	16268				H0556: 1 and H0445: 1.		
HTXNQ63	951939	6517	29 - 229	16269			Pro-1 to Gly-9, Lys-16 to Cys-27.	H0556: 3		
HTXNR01	913781	6518	151 - 396	16270				H0556: 2, H0265: 1, H0255: 1 and H0444: 1.		
HTXNR17	856465	6519	45 - 479	16271			Arg-1 to Lys-14, Glu-37 to Gly-43, Cys-47 to Gly-57, Ala-103 to Gly-108.	H0556: 8, H0265: 1, S0114: 1, H0445: 1 and H0542: 1.		
HTXNT07	952165	6520	182 - 775	16272			Pro-14 to Pro-28.	L0740: 3, L0777: 2, H0556: 1, S0114: 1 and L0780: 1.		
HTXNT43	869398	6521	509 - 664	16273				H0265: 1 and H0556: 1.		
HTXNT76	869189	6522	481 - 732	16274				H0556: 2, L0439: 2, L0438: 1, L0747: 1 and L0749: 1.		
HTXNU51	972837	6523	3 - 350	16275				H0556: 3		
HTXNY70	869289	6524	67 - 315	16276			Val-27 to Leu-32.	H0556: 2		
HTXNY74	918076	6525	36 - 536	16277			Arg-1 to Gly-7, Phe-11 to Arg-23.	H0556: 2 and H0179: 1.		
HTXOC32	869280	6526	394 - 639	16278				H0556: 2 and H0265: 1.		

HTXOD62	806643	6527	13 - 234	16279			H0556: 1 and H0522: 1.		
HTXOG84	929289	6528	20 - 358	16280	His-2 to Gly-10, Glu-22 to Arg-28.		H0265: 1, H0556: 1, H0657: 1 and H0543: 1.		
HTXOH04	926909	6529	119 - 295	16281			H0556: 2		
HTXOH60	869271	6530	2 - 172	16282			H0265: 1 and H0556: 1.		
HTXOJ50	869279	6531	348 - 554	16283			H0556: 4		
HTXOJ92	974039	6532	280 - 477	16284	Asn-1 to Arg-11, Pro-13 to Ser-24.		H0265: 2, H0556: 2, H0255: 2 and H0423: 1.		
HTXOM10	963435	6533	1 - 108	16285	Met-13 to His-21.		H0265: 1 and H0556: 1.		
HTXOO06	934248	6534	347 - 535	16286	Thr-55 to Gln-61.		H0556: 2, L0749: 2, S0218: 1 and L0748: 1.		
HTXOO83	898860	6535	105 - 410	16287			H0556: 3, S0052: 2, S0134: 1, H0306: 1 and S0053: 1.		
HTXOR11	965090	6536	2 - 148	16288	Lys-1 to Glu-6.		H0556: 2		
HTXOR48	869253	6537	262 - 591	16289	Pro-46 to Gln-52, Thr-61 to Val-70.		H0556: 2 and L0595: 1.		
HTXOR86	914739	6538	64 - 255	16290	Gln-35 to His-44.		H0556: 4		
HTXOS47	965558	6539	34 - 198	16291	Gln-1 to Gly-8.		H0556: 3, L0759: 3, S0212: 1 and L0805: 1.		
HTXOT42	974034	6540	74 - 433	16292			H0556: 7, H0265: 1 and L0748: 1.		
HTXOU06	852057	6541	329 - 547	16293			H0556: 2 and H0486: 1.		
HTXOU48	869252	6542	2 - 262	16294	Lys-1 to Tyr-11, Thr-13 to Lys-21, Ser-79 to Arg-87.		H0556: 2		
HTXOU67	906909	6543	229 - 414	16295	Pro-22 to Ser-28.		H0556: 2		
HTXOX02	918556	6544	329 - 553	16296	Arg-8 to Arg-14.		H0556: 1 and H0318: 1.		
HTXOX42	920274	6545	209 - 553	16297	Pro-45 to Ser-53.		H0255: 2 and H0556: 1.		
HTXOZ02	918566	6546	95 - 289	16298			H0556: 2		
HTXPF93	954976	6547	2 - 178	16299			AR051: 33, AR054: 28, AR050: 24 H0556: 2		
HTXPI03	922877	6548	274 - 486	16300			H0556: 1 and H0271: 1.		
HTXPK10	963397	6549	112 - 450	16301	Ser-1 to Thr-13.		H0556: 2 and H0521: 1.		
HTXPK28	957888	6550	55 - 231	16302			H0556: 4 and H0265: 1.		

HTXPO91	869224	6551	114 - 350	16303	Gln-23 to Leu-28, Trp-66 to Gln-74.	H0436: 2 and H0556: 1.		
HTXPO92	869214	6552	330 - 518	16304	Thr-30 to Thr-37.	H0556: 2		
HTXPP33	799925	6553	3 - 635	16305		AR054: 10, AR050: 8, AR051: 2 H0265: 2 and H0556: 1.		
HTXPR92	869221	6554	36 - 320	16306	Arg-15 to Ser-21, Arg-25 to Gly-30, Lys-74 to Lys-81.	H0556: 2		
HTXPT68	870074	6555	2 - 469	16307	Pro-46 to Ser-51.	AR089: 2, AR061: 2 H0556: 2		
HTXPW03	922884	6556	94 - 330	16308		H0265: 1 and H0556: 1.		
HTXPW20	869198	6557	252 - 485	16309	Leu-12 to Glu-24, Lys-52 to Ala-57.	H0556: 2		
HTXPX02	918494	6558	117 - 470	16310	Leu-7 to Gly-17, Thr-20 to Glu-29, Gln-45 to Phe-52, Phe-56 to Tyr-61, Glu-102 to Gln-116.	H0556: 2, H0265: 1 and L0523: 1.		
HTXQA18	869184	6559	375 - 605	16311	Thr-31 to Pro-38, Pro-68 to Gln-73.	S0114: 3 and H0556: 1.		
HTXQC36	961161	6560	337 - 522	16312	Arg-37 to Tyr-44.	H0556: 1 and H0255: 1.		
HTXQC77	974033	6561	444 - 698	16313	Ser-2 to Ser-8.	H0556: 3 and H0265: 1.		
HTXQF10	963403	6562	386 - 541	16314		H0265: 1 and H0556: 1.		
HTXQM11	965645	6563	121 - 303	16315	Thr-5 to Gly-10, Glu-52 to Leu-60.	H0556: 1 and S0053: 1.		
HTXQN24	963503	6564	1 - 447	16316	Pro-6 to Gly-12.	H0556: 2 and L0758: 1.		
HTXQR90	869139	6565	2 - 421	16317	Met-11 to His-26, Ser-62 to Ser-67, Ala-71 to Pro-77.	H0265: 1 and H0556: 1.		
HTXQU07	952030	6566	43 - 189	16318		H0556: 1 and H0543: 1.		
HTXQW02	918081	6567	196 - 459	16319		H0556: 2		
HTXQW29	869134	6568	105 - 386	16320		H0556: 2 and T0041: 1.		
HTXRA11	965596	6569	221 - 397	16321		H0556: 2		
HTXRB38	869133	6570	20 - 193	16322	Gln-1 to Gly-9, Lys-47 to Ser-53.	H0556: 1 and H0486: 1.		

HTXRC17	973981	6571	91 - 330	16323	Gln-7 to Lys-13, Trp-65 to Thr-72.	H0556: 2 and S0218: 1.		
HTXRD51	921285	6572	13 - 219	16324	Pro-11 to Ala-18, Ser-38 to Arg-44, Lys-59 to Pro-68.	H0556: 1 and H0069: 1.		
HTXRE04	926371	6573	3 - 227	16325	Gln-1 to Pro-10, Pro-32 to Arg-50.	H0556: 2		
HTXRJ02	918031	6574	1 - 321	16326	Ser-5 to Ser-15, Gly-73 to Asp-86.	H0556: 1 and H0318: 1.		
HTXRM86	975072	6575	3 - 578	16327		AR061: 2, AR089: 1 H0556: 3		
HTXRO02	918009	6576	99 - 206	16328		H0556: 2		
HTXSB88	914627	6577	541 - 846	16329	Lys-26 to Glu-31, Ala-42 to Tyr-49, Glu-79 to Trp-95.	H0556: 1, H0650: 1 and L0731: 1.		
HTXSK91	915903	6578	298 - 462	16330	Glu-4 to Ser-14, Asp-20 to Leu-25.	H0556: 1 and H0521: 1.	Xp21.1	301220, 302350, 306400, 309470, 309585, 311250, 312040, 312610, 314850
HTXSR92	973095	6579	132 - 428	16331		AR089: 0, AR061: 0 H0265: 1, H0556: 1 and H0083: 1.		
HTYNC52	869119	6580	451 - 251	16332	Leu-21 to Gly-27, Pro-39 to Lys-57.	S0216: 1 and S0452: 1.		
HTYSB62	768350	6581	26 - 250	16333	Val-1 to Ile-8, Glu-64 to Leu-72.	H0116: 2		
HTYSD32	702994	6582	1 - 258	16334		H0581: 1, H0116: 1 and L0746: 1.		
HTZAB04	973811	6583	382 - 648	16335	Thr-1 to Val-7.	S0318: 2 and S0140: 1.		
HUJAB25	878465	6584	3 - 353	16336	Gly-79 to Cys-84.	H0650: 2		
HUJAG07	951873	6585	215 - 3	16337	Tyr-2 to Thr-8, Lys-65 to Lys-71.	L0766: 4, H0318: 3, H0650: 1, L0772: 1 and L0774: 1.		
HUJAM39	911399	6586	631 - 1323	16338	Arg-1 to Trp-7, Arg-14 to Cys-32, Gln-65 to Leu-75.	H0457: 4, H0650: 1, H0656: 1, H0255: 1, H0641: 1 and L0766: 1.		



HUJBL07	951874	6587	1 - 195	16339			H0650: 1 and H0318: 1.		
HUJCB67	958914	6588	2 - 265	16340			H0318: 2, H0650: 1 and H0488: 1.		
HUJCM08	957784	6589	2 - 733	16341		Arg-9 to Trp-15, Ser-36 to Lys-49, Glu-95 to Ala-104, Pro-113 to His-118, Arg-124 to Gly-130, Arg-146 to Asp-153, Arg-159 to Arg-168.	H0585: 2 and H0650: 1.	5p15.33	
HUJCT61	933920	6590	304 - 606	16342		Pro-35 to Pro-40.	H0265: 1, H0556: 1 and H0650: 1.		
HUJCV04	926175	6591	3 - 329	16343		Arg-1 to Met-8.	H0650: 1 and H0580: 1.		
HUJDB08	957786	6592	579 - 773	16344			H0650: 1, H0318: 1 and H0090: 1.		
HUJDI58	920851	6593	12 - 359	16345			S0114: 1 and H0650: 1.		
HUUAJ10	914330	6594	552 - 764	16346		Ser-13 to Arg-20, Glu-23 to His-28.	H0656: 2, L0749: 2, H0657: 1 and H0264: 1.		
HUUAPE82	966685	6595	168 - 650	16347		Cys-14 to His-23, Arg-27 to Arg-45.	H0656: 2 and H0318: 1.		
HUUAAS12	968953	6596	3 - 656	16348		Ser-42 to Pro-47.	H0656: 2 and H0486: 1.		
HUUAUV06	966816	6597	88 - 396	16349		Gly-1 to Ser-9, Arg-19 to Arg-28, Ala-36 to Gly-43, Ser-73 to Pro-78.	H0656: 2, L0748: 1 and L0757: 1.	22q13.2-q13.31	188826, 250100, 250800, 250800
HUUAUV83	921559	6598	80 - 316	16350			H0254: 2 and H0656: 1.		
HUUCI06	933322	6599	115 - 354	16351		Val-39 to Asn-44.	H0656: 1 and S0053: 1.		
HUUCI07	951824	6600	158 - 361	16352			H0656: 2		
HUUCO12	969258	6601	3 - 53	16353			H0656: 2		
HUUCP08	957715	6602	247 - 429	16354			H0656: 2		
HUUCQ03	915269	6603	1 - 585	16355		Thr-40 to Lys-48, Lys-53 to Glu-58, Ser-74 to Ser-80, Phe-82 to Leu-91, Lys-141 to Asp-146, Arg-161 to Asp-167,	H0656: 1, H0581: 1, H0591: 1 and H0521: 1.		

HUUCS49	965987	6604	86 - 502	16356	Asp-177 to Lys-183.	H0656: 2		
HUUDG08	957721	6605	148 - 267	16357	Gln-9 to Thr-16,	H0656: 1 and H0306: 1.		
HUUDJ10	961717	6606	420 - 524	16358	Pro-36 to Glu-52.	H0656: 2		
HUUDS10	961706	6607	89 - 238	16359	Asn-18 to Gly-38.	H0650: 1 and H0656: 1.		
HWAABE23	675326	6608	497 - 706	16360		H0265: 1, H0556: 1, S0114: 1, H0581: 1, L0532: 1, L0758: 1 and L0599: 1.		
HWAABE55	719194	6609	98 - 349	16361	Asp-21 to Gly-26, Leu-50 to Ser-57.	H0370: 1 and H0581: 1.		
HWAABE90	778917	6610	87 - 287	16362		H0581: 1 and S0053: 1.		
HWAABF27	721151	6611	2 - 313	16363	Asp-28 to Thr-34.	H0485: 1 and H0581: 1.		
HWAABF66	908541	6612	3 - 320	16364	Arg-1 to Gly-11, Ser-40 to Asp-46.	AR089: 5, AR061: 2 H0583: 1, H0581: 1 and H0083: 1.		
HWAABF81	712203	6613	177 - 34	16365	Lys-6 to Gly-13.	H0581: 1 and H0457: 1.		
HWAAL31	697716	6614	2 - 550	16366	Gly-8 to Trp-13, Pro-34 to Thr-46, Glu-66 to Pro-79, Ala-85 to Ala-100, Gln-102 to Glu-120, Glu-143 to Gln-156, Ser-168 to Ser-177.	H0581: 1 and H0457: 1.		
HWAAM04	614973	6615	131 - 295	16367		H0265: 1 and H0581: 1.		
HWAAM23	675712	6616	136 - 384	16368		H0635: 1, H0581: 1, L0545: 1, L0748: 1 and L0591: 1.		
HWAAR36	915621	6617	195 - 353	16369	Phe-44 to Gln-53.	H0581: 2 and S0116: 1.		
HWAAW74	935602	6618	2 - 127	16370	Gln-1 to Gln-7.	H0402: 1 and H0581: 1.		
HWAAY03	923734	6619	176 - 373	16371		H0581: 1 and H0423: 1.		
HWABA49	859878	6620	83 - 382	16372	Leu-72 to Phe-79.	H0069: 1 and H0581: 1.		
HWABB37	870088	6621	2 - 382	16373	Gly-8 to Ala-18, Thr-92 to Thr-100.	H0581: 1 and H0521: 1.		
HWABE67	751418	6622	1 - 150	16374		H0581: 2		
HWABE94	838096	6623	406 - 182	16375	Val-22 to Gly-36, Pro-48 to His-53.	H0581: 2		

HWABF91	698131	6624	64 - 231	16376	Ser-2 to Gly-9.	H0581: 1 and H0422: 1.		
HWABI18	529803	6625	38 - 211	16377		S0114: 1, H0581: 1, H0264: 1 and S0053: 1.		
HWABQ57	734536	6626	3 - 125	16378	Arg-15 to Tyr-21, Pro-30 to Gln-41.	H0581: 2		
HWABS04	494837	6627	15 - 206	16379		H0581: 2, H0625: 1, S0428: 1, H0436: 1 and H0423: 1.		
HWABS51	719221	6628	3 - 209	16380		S0116: 1 and H0581: 1.		
HWABT82	784211	6629	1 - 117	16381	Phe-13 to Cys-18.	H0581: 2		
HWABW02	919441	6630	3 - 212	16382		H0581: 1 and S0052: 1.		
HWABW15	659944	6631	561 - 830	16383		H0581: 1 and H0444: 1.		
HWABW34	703861	6632	120 - 290	16384	Lys-15 to Pro-20.	H0581: 1 and H0487: 1.		
HWABW78	865145	6633	74 - 265	16385	Arg-11 to Cys-16.	H0581: 1 and S0142: 1.		
HWABX49	685187	6634	103 - 345	16386	Ser-14 to Lys-31, Pro-41 to Glu-55, Lys-63 to Glu-72.	H0581: 1 and H0522: 1.		
HWABX68	752825	6635	119 - 262	16387	Leu-1 to Val-14.	S0114: 1 and H0581: 1.		
HWABY12	968857	6636	281 - 577	16388	Asn-8 to Thr-16, Ser-28 to Phe-34, Thr-76 to Gly-85.	H0581: 1 and H0445: 1.		
HWACA38	943074	6637	2 - 577	16389	Asp-81 to Ile-89, Asn-112 to Ser-125, Leu-179 to Ser-189.	AR054: 255, AR050: 206, AR051: 141 H0271: 18, H0556: 9, H0265: 8, H0581: 8, L0761: 4, H0543: 4, H0422: 4, H0656: 3, H0457: 3, L0766: 3, T0002: 2, L0748: 2, H0220: 1, H0650: 1, S0282: 1, H0610: 1, H0069: 1, H0635: 1, H0179: 1, H0416: 1, H0031: 1, H0090: 1, T0041: 1, H0560: 1, H0529: 1, L0667: 1, L0649: 1, L0803: 1, L0659: 1, L0666: 1, S0052: 1, S0216: 1, H0702: 1, H0518: 1, H0521: 1.		

HWACB75	685247	6638	273 - 461	16390	Ile-22 to Asn-32, Gly-36 to Asp-49.	1, L0750: 1, H0445: 1, H0423: 1, H0677: 1 and H0506: 1.		
HWACG21	868530	6639	216 - 1	16391		S0114: 1 and H0581: 1.		
HWACG64	675517	6640	192 - 356	16392	Arg-38 to Ser-47.	H0581: 2		
HWACG68	752710	6641	163 - 351	16393	Arg-41 to Gly-48.	H0581: 2 and L0697: 1.		
HWACG94	670912	6642	185 - 322	16394		H0581: 2		
HWACH33	686740	6643	76 - 264	16395		S0114: 1, H0581: 1 and H0543: 1.		
HWACH49	722572	6644	128 - 349	16396	Pro-8 to Ser-14, Ser-55 to Lys-60.	H0581: 1 and S0052: 1.		
HWACK78	753565	6645	31 - 222	16397	Lys-37 to Ala-43.	H0581: 2		
HWACM17	662307	6646	2 - 148	16398		S0114: 1 and H0581: 1.		
HWACP03	869938	6647	3 - 320	16399		H0581: 1 and H0422: 1.		
HWACQ19	668093	6648	193 - 528	16400		H0581: 1 and H0264: 1.		
HWACR28	685983	6649	212 - 403	16401		H0581: 2		
HWACR77	771777	6650	1 - 117	16402		H0581: 3 and H0580: 1.		
HWACU96	787349	6651	116 - 259	16403		H0581: 2		
HWACV04	927275	6652	177 - 85	16404	Thr-9 to Leu-15.	H0581: 2 and H0436: 1.		
HWACX82	705560	6653	61 - 186	16405		H0581: 1 and S0052: 1.		
HWADA93	647703	6654	236 - 493	16406		H0581: 2, L0439: 2, H0318: 1, L0438: 1 and L0748: 1.		
HWADE38	709487	6655	327 - 446	16407		H0581: 1 and H0421: 1.		
HWADF26	957347	6656	1099 - 506	16408	Ala-45 to Asp-53, Asn-57 to Asp-68, Glu-84 to Cys-92, Asn-97 to Ser-105.	AR050: 78, AR054: 61, AR051: 60, AR061: 2, AR089: 1 H0581: 2, S0114: 1 and L0362: 1.		
HWADG01	915567	6657	120 - 350	16409	Asn-25 to Gly-30.	S0114: 1 and H0581: 1.		
HWADG26	680182	6658	226 - 423	16410		S0218: 1 and H0581: 1.		
HWADG27	958200	6659	300 - 605	16411	Gly-20 to Asp-26.	H0581: 2		
HWADI32	698651	6660	154 - 369	16412		H0581: 2		
HWADI53	727820	6661	41 - 298	16413	Ala-1 to Tyr-8,	L0748: 3, H0581: 2 and		

HWADJ29	690074	6662	109 - 285	16414	Asp-33 to Ser-38.	H0402: 1.		
HWADL02	918986	6663	48 - 143	16415	Phe-12 to Thr-17.	H0581: 1 and H0444: 1.		
HWADL36	706697	6664	38 - 292	16416	Pro-11 to Ile-16, Ile-40 to Cys-51, Gly-62 to Tyr-67.	H0581: 2 H0581: 1 and H0521: 1.		
HWADM30	868520	6665	97 - 297	16417	Ser-2 to Pro-8, Phe-16 to Cys-22.	S0114: 1 and H0581: 1.		
HWADN19	657528	6666	297 - 109	16418	Leu-33 to Lys-50.	H0457: 2 and H0581: 1.		
HWADN21	670274	6667	203 - 418	16419	Cys-1 to Arg-6.	H0250: 1 and H0581: 1.		
HWADN46	924888	6668	264 - 572	16420		H0271: 2 and H0581: 1.		
HWADO54	729136	6669	253 - 393	16421		H0581: 2 and H0264: 1.		
HWADP26	680211	6670	3 - 635	16422	Pro-20 to Gln-25, Ser-31 to Cys-36, Leu-39 to Ser-52, Val-64 to Ser-73, Ala-89 to Glu-98, Ser-100 to Glu-109, Val-113 to Gln-119, Lys-146 to Pro-151.	S0114: 1 and H0581: 1.		
HWADQ27	682448	6671	444 - 584	16423		H0318: 1 and H0581: 1.		
HWADQ91	693834	6672	212 - 358	16424		H0581: 2		
HWADR47	944042	6673	109 - 252	16425	Leu-1 to Trp-6.	S0212: 1 and H0581: 1.	4	
HWADS43	675454	6674	12 - 185	16426	Tyr-18 to Cys-27.	H0581: 2, L0790: 1 and S0428: 1.		
HWADS53	717544	6675	1 - 105	16427	Asp-17 to Asn-23.	H0581: 2, L0805: 1 and H0521: 1.		
HWADV51	916669	6676	3 - 326	16428		H0581: 1 and H0436: 1.		
HWADV82	708688	6677	251 - 382	16429		H0581: 1 and H0271: 1.		
HWADW41	722343	6678	2 - 334	16430	Gly-35 to Thr-40.	H0581: 1, L0743: 1 and H0543: 1.		
HWADX46	718647	6679	337 - 570	16431	Glu-1 to Pro-9, Pro-37 to Lys-42.	H0265: 1 and H0581: 1.		
HWADX62	868509	6680	218 - 424	16432	Glu-6 to Ser-14, Thr-39 to Gln-45.	H0581: 2 and H0583: 1.		
HWADY59	738874	6681	2 - 262	16433	Thr-5 to Lys-17.	H0581: 1, H0063: 1, H0436:		

HWADZ21	670270	6682	2 - 166	16434	Ser-1 to Asn-10.	1, H0444: 1 and L0599: 1.	
HWADZ84	782682	6683	2 - 97	16435		H0581: 1 and S0142: 1.	
HWAEA55	731094	6684	28 - 240	16436	Ala-1 to Leu-6.	H0581: 2	
HWAEA60	964384	6685	224 - 403	16437	Leu-6 to Gln-15.	S0218: 1 and H0581: 1.	
HWAEB19	750811	6686	2 - 154	16438		H0581: 1 and H0445: 1.	
HWAEB94	778009	6687	2 - 184	16439	Lys-46 to Glu-60.	S0114: 1 and H0581: 1.	
HWAEBC75	852921	6688	506 - 709	16440	His-5 to Arg-13, Leu-18 to Leu-23.	H0581: 1 and H0457: 1.	
HWAEGB01	915064	6689	70 - 168	16441		H0581: 3, H0318: 2, L0766: 2, L0438: 2, L0439: 2, L0758: 2, H0485: 1, L0451: 1, L0542: 1, L0745: 1 and H0543: 1.	
HWAEK82	868489	6690	263 - 463	16442		H0581: 1 and H0444: 1.	
HWAEEN20	868490	6691	119 - 472	16443		H0581: 2 and H0543: 2.	
HWAFD32	850048	6692	43 - 279	16444	Leu-1 to Pro-6, Pro-13 to Glu-18, Gly-51 to Gly-62, Arg-71 to Tyr-79.	H0580: 1, H0581: 1 and L0748: 1.	
HWAFG08	958173	6693	3 - 149	16445	Asn-23 to His-35.	H0402: 1 and H0581: 1.	
HWAFR09	973926	6694	156 - 341	16446		S0114: 1, H0402: 1 and H0581: 1.	
HWAFI03	922832	6695	288 - 413	16447		H0581: 1 and H0090: 1.	
HWAFW34	926801	6696	6 - 179	16448	Ser-8 to Val-16, Ser-43 to Cys-49.	S0134: 1 and H0581: 1.	
HWAFW39	947915	6697	188 - 370	16449		H0581: 2	
HWAFX39	907631	6698	1 - 369	16450	Asn-36 to Arg-48, His-107 to Tyr-112.	AR089: 2, AR061: 1 H0255: 1 and H0581: 1.	
HWAFY24	868427	6699	113 - 361	16451		H0581: 1 and H0543: 1.	
HWAFZ13	873396	6700	74 - 415	16452	Ser-35 to Arg-48, Leu-79 to Asn-88.	H0581: 2	
HWAFZ82	868426	6701	52 - 288	16453	Gly-12 to His-17.	H0635: 2, H0581: 1 and H0521: 1.	
HWAGC76	941311	6702	52 - 399	16454	Pro-21 to Ala-27, Ala-49 to Ala-56.	H0581: 2	
						S0278: 8, S0344: 5, L0740: 3, H0250: 2, H0581: 2.	

							H0457: 2, S0142: 2, L0774: 2, L0749: 2, S0116: 1, H0031: 1, H0063: 1, S0144: 1, S0002: 1, L0800: 1, L0744: 1, L0777: 1 and H0653: 1.		
HWAGD11	965895	6703	3 - 530	16455		Pro-38 to Lys-44, Arg-64 to Gln-79, Pro-129 to Gly-139, Arg-145 to Pro-151, Pro-154 to Arg-159.	H0581: 1 and H0542: 1.		
HWAGD58	869383	6704	3 - 224	16456		Lys-39 to Pro-47.	H0556: 1, H0581: 1 and L0776: 1.		
HWAGE40	926279	6705	2 - 262	16457		Pro-31 to Phe-36, Gln-39 to Gln-45.	H0250: 2 and H0581: 1.		
HWAGG79	930876	6706	32 - 286	16458		Glu-30 to Leu-48, Cys-53 to Ser-60.	H0581: 1 and H0543: 1.		
HWAGJ49	838759	6707	357 - 536	16459			H0581: 2		
HWAGK95	868403	6708	238 - 441	16460			H0581: 2 and H0264: 1.		
HWAGL53	842011	6709	180 - 422	16461		Gly-37 to Leu-42.	H0581: 1 and H0457: 1.		
HWAGM33	888685	6710	526 - 1140	16462		Ser-68 to Val-74, Pro-87 to Arg-97, Cys-153 to Trp-164, Arg-172 to Cys-178.	AR089: 1, AR061: 0 H0305: 1, H0581: 1, L0745: 1 and L0747: 1.		
HWAGX37	959586	6711	390 - 662	16463		Gly-29 to Ser-35.	H0457: 3, H0581: 1 and H0445: 1.		
HWAGY05	931001	6712	127 - 369	16464			H0264: 2, H0556: 1, H0581: 1 and H0444: 1.		
HWAGZ22	868523	6713	70 - 378	16465		Pro-33 to Phe-41, Phe-52 to Cys-58, Pro-88 to Cys-93.	H0581: 2, H0224: 1 and H0160: 1.		
HWAH110	960646	6714	1344 - 280	16466			H0581: 1 and T0041: 1.		
HWAH594	909667	6715	1 - 471	16467		Pro-52 to Ser-60, Ala-92 to Gly-102.	H0581: 2, H0341: 1, H0521: 1, H0543: 1 and S0452: 1.		
HWAI02	918215	6716	428 - 607	16468			H0581: 2		
HWBAB43	715110	6717	3 - 341	16469		Ile-2 to Asp-8,	H0580: 1 and H0521: 1.		

HWBAB69	582109	6718	2 - 388	16470	Asp-36 to Glu-44, Arg-62 to Leu-67, Arg-74 to Ala-80, Pro-100 to Gly-106.	H0580: 2, L0748: 1 and S0308: 1.	19q13.3	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 258501, 600040, 602225, 602225
HWBAC22	823086	6719	932 - 657	16471	Met-36 to Tyr-44.	H0580: 1 and H0457: 1.		
HWBAL44	959449	6720	566 - 3	16472	Pro-27 to Thr-32, Pro-42 to Trp-48, Asp-109 to Arg-115, Phe-126 to Asp-136, Thr-145 to Lys-151.	H0580: 2, S0002: 2 and L0779: 2.		
HWBAN54	729329	6721	77 - 217	16473	Glu-16 to Phe-23, Leu-35 to Lys-42.	H0580: 1 and H0444: 1.		
HWBAQ16	868363	6722	767 - 925	16474		H0445: 2, H0580: 1, L0761: 1 and L0697: 1.		
HWBAR44	715963	6723	2 - 187	16475	Ala-47 to Asp-52.	H0580: 2 and L0747: 2.		
HWBAR90	788700	6724	427 - 561	16476	Ser-1 to Lys-6.	H0580: 1 and H0416: 1.		
HWBAS92	960197	6725	321 - 575	16477	Asn-1 to His-10, Ala-40 to Ile-45.	H0305: 2, H0580: 1 and L0518: 1.		
HWBAX06	935032	6726	1 - 117	16478	Gly-9 to Gly-21.	H0580: 1 and H0486: 1.		
HWBAX39	630220	6727	282 - 467	16479	Asp-1 to Cys-6.	H0580: 2		
HWBAZ51	707033	6728	246 - 413	16480	Arg-10 to Ser-15, Lys-34 to Pro-41.	H0580: 1 and H0264: 1.		
HWBBA64	927809	6729	120 - 371	16481	Leu-40 to Lys-45.	H0580: 1 and H0264: 1.		
HWBBA83	775401	6730	365 - 571	16482	Gly-22 to Gly-40, Pro-47 to Asn-54.	H0402: 1 and H0580: 1.		
HWBBB48	559708	6731	32 - 250	16483	Gly-13 to Trp-18, Ile-29 to Thr-35, Ala-42 to Ala-52.	H0580: 2		
HWBBE01	851029	6732	107 - 361	16484		H0580: 1 and H0457: 1.		
HWBBF31	868359	6733	3 - 230	16485		H0580: 1 and H0551: 1.		



HWBBI20	669491	6734	34 - 243	16486	Met-1 to Glu-18.	H0580: 2		
HWBBI54	971547	6735	45 - 200	16487	Glu-38 to Lys-45.	H0580: 1 and H0128: 1.		
HWBBL78	723183	6736	294 - 500	16488	Glu-57 to Glu-64.	L0748: 2, H0580: 1, L0171: 1, L0662: 1, S0052: 1 and H0522: 1.		
HWBBM28	686259	6737	177 - 374	16489		S0116: 1 and H0580: 1.	8q24-qter	
HWBBO46	718858	6738	428 - 571	16490		H0580: 1, L0748: 1 and H0444: 1.		
HWBBQ40	660971	6739	85 - 282	16491		H0254: 1 and H0580: 1.		
HWBBQ86	656704	6740	10 - 228	16492		S0298: 1 and H0580: 1.		
HWBBR65	747723	6741	32 - 232	16493	Gly-1 to Ser-9.	AR089: 28, AR061: 24 L0748: 2, H0580: 1 and H0421: 1.		
HWBBR78	663728	6742	148 - 354	16494	Asn-30 to Gln-39.	H0580: 1 and H0521: 1.		
HWBBV03	868346	6743	109 - 270	16495		H0402: 1 and H0580: 1.		
HWBBV59	682344	6744	232 - 348	16496	Trp-2 to Asp-11.	H0580: 2		
HWBBV83	771349	6745	3 - 257	16497		H0543: 2 and H0580: 1.		
HWBBW11	966665	6746	1 - 231	16498	Leu-10 to Ser-15, Gly-59 to Gly-66, Arg-72 to Cys-77.	H0402: 1, H0580: 1 and L0055: 1.		
HWBBX08	860880	6747	209 - 580	16499		H0580: 1 and H0271: 1.		
HWBBY01	916036	6748	218 - 436	16500	Leu-33 to Ile-40.	L0766: 2, S0134: 1, H0580: 1, L0060: 1 and L0747: 1.		
HWBBY74	711633	6749	239 - 397	16501	Ser-10 to Pro-21.	H0580: 1 and H0087: 1.		
HWBCA14	768667	6750	231 - 368	16502		H0580: 1 and S0002: 1.		
HWBCA22	674236	6751	209 - 472	16503	Lys-47 to Ser-54.	H0580: 2		
HWBCA92	712731	6752	320 - 442	16504	Lys-1 to Leu-7.	H0580: 1 and H0179: 1.		
HWBCC85	784189	6753	188 - 316	16505	His-1 to Lys-21.	H0580: 2		
HWBCC90	744828	6754	67 - 210	16506		H0580: 2		
HWBCF85	738552	6755	155 - 277	16507		H0580: 1 and H0318: 1.		
HWBCG35	707803	6756	3 - 299	16508	Gly-1 to Ser-12, Leu-19 to Arg-26, Pro-40 to Arg-46, Asp-52 to Asn-61, Arg-65 to Lys-71, Lys-76 to Gly-84.	H0580: 1 and H0090: 1.		

HWBCG45	527679	6757	13 - 177	16509	Pro-17 to Asn-31.	H0305: 2, H0580: 1 and H0576: 1.		
HWBCI65	868326	6758	267 - 106	16510	Pro-18 to Lys-41.	H0580: 2		
HWBCN09	868325	6759	141 - 347	16511		H0580: 1 and H0635: 1.		
HWBCN55	715064	6760	63 - 326	16512	Arg-25 to Asn-32.	H0580: 1 and H0581: 1.		
HWBCQ10	964233	6761	195 - 377	16513	Tyr-45 to Lys-51.	H0580: 1, H0581: 1 and L0529: 1.		
HWBCQ29	943720	6762	9 - 251	16514	Pro-14 to Met-22, Lys-25 to Ile-31, Ala-55 to His-65, Thr-74 to Lys-81.	AR089: 1, AR061: 1 H0580: 1, H0416: 1 and H0521: 1.		
HWBCS21	960025	6763	148 - 513	16515	Pro-1 to Lys-12, Pro-30 to Gln-35.	S0114: 1 and H0580: 1.		
HWBCS66	765986	6764	545 - 727	16516	Asp-10 to Gly-18.	H0186: 1 and H0580: 1.		
HWBCU82	955858	6765	176 - 382	16517	His-11 to Pro-19.	H0271: 2 and H0580: 1.		
HWBCW04	925649	6766	302 - 541	16518		H0580: 1 and H0445: 1.		
HWBCW88	882592	6767	283 - 636	16519	Lys-21 to Pro-44, Ser-61 to Arg-67, Asn-70 to His-75.	L0731: 5, L0779: 3, L0777: 2, H0580: 1, S0344: 1, L0768: 1, L0751: 1, L0745: 1, L0747: 1 and L0759: 1.		
HWBCW90	731395	6768	142 - 282	16520	Ser-5 to Asn-10.	H0580: 3		
HWBCY30	828318	6769	3 - 476	16521	His-1 to Asp-20, Pro-52 to Phe-57, Gly-64 to Glu-75.	H0580: 1, H0090: 1, L0662: 1, L0766: 1, L0776: 1, L0792: 1, L0740: 1, L0777: 1 and L0752: 1.		
HWBDL50	724145	6770	301 - 513	16522		H0580: 1, H0581: 1 and H0271: 1.		
HWBDM24	963498	6771	741 - 1040	16523		H0521: 2, H0580: 1 and H0522: 1.		
HWBDP31	697705	6772	136 - 426	16524	Asp-11 to Leu-16, Trp-35 to Leu-41, Arg-54 to Pro-60.	H0580: 2		
HWBDR66	750586	6773	370 - 522	16525		H0580: 2		
HWBDS89	771950	6774	76 - 270	16526	Thr-4 to Leu-29, Tyr-42 to Gly-48.	H0580: 2		
HWBDT15	659939	6775	62 - 184	16527		H0580: 1 and S0052: 1.		

HWBDW71	597259	6776	313 - 438	16528			H0580: 2		
HWBEA72	950702	6777	3 - 203	16529			H0580: 2		
HWBEI17	924913	6778	3 - 182	16530			S0116: 1 and H0580: 1.		
HWBEL53	968493	6779	26 - 118	16531			H0580: 1 and H0271: 1.		
HWBEL53	727617	6780	123 - 287	16532			H0580: 2		
HWBEL70	735390	6781	169 - 456	16533		Asp-1 to Gly-6.	H0580: 2		
HWBEL85	954600	6782	46 - 204	16534			H0580: 2 and H0179: 1.		
HWBEV44	716215	6783	43 - 195	16535		Asn-10 to Gln-15, Glu-31 to Phe-37.	H0580: 2 and L0740: 1.		
HWBEV94	788574	6784	166 - 2	16536		Gly-2 to Pro-12, Gly-48 to Met-54.	H0580: 2		
HWBEX27	682583	6785	1 - 489	16537		Leu-5 to His-12.	AR089: 1, AR061: 0 H0580: 2, L0663: 2, L0662: 1, L0657: 1, L0659: 1, L0666: 1, L0438: 1, L0748: 1 and L0777: 1.	15q15	177070, 177070, 182500, 218000, 227220, 243500, 600839, 601800
HWBEV38	709497	6786	226 - 366	16538			H0580: 1 and H0069: 1.		
HWBEZ47	719940	6787	2 - 160	16539			H0580: 2		
HWBEZ69	664699	6788	127 - 345	16540			H0580: 1, H0264: 1 and H0625: 1.		
HWBEZ90	923008	6789	181 - 336	16541		Asn-9 to Cys-14.	H0580: 2, L0775: 2 and H0521: 2.		
HWBEZ94	856472	6790	188 - 340	16542			H0580: 1, L0521: 1 and H0445: 1.		
HWBFE76	769769	6791	310 - 420	16543		Tyr-1 to Lys-6, Gly-20 to Trp-33.	H0580: 2		
HWBFG09	625162	6792	1 - 195	16544		Pro-13 to Gly-20.	H0580: 2		
HWBFL35	722921	6793	173 - 328	16545		Arg-8 to Arg-22, Asp-28 to Lys-34.	H0580: 2		
HWBFL96	708955	6794	155 - 406	16546		Gln-15 to Glu-22.	H0580: 2		
HWBFM58	735701	6795	1 - 162	16547			H0580: 2		
HWBFM78	773289	6796	117 - 365	16548		Ser-17 to Gly-29, Arg-35 to Ala-42.	H0580: 2		
HWBFN30	691611	6797	188 - 3	16549		Ser-4 to Lys-9.	H0580: 2		
HWBFY69	754729	6798	135 - 257	16550			H0580: 2		

HWBFY88	701904	6799	1 - 111	16551			H0580: 2		
HWBGB08	958611	6800	1 - 84	16552	Thr-16 to Glu-21.		H0580: 1 and H0522: 1.		
HWBGB47	948714	6801	2 - 124	16553			H0580: 2		
HWBGD16	924830	6802	102 - 302	16554			H0580: 1 and H0477: 1.	10q26	176943, 176943, 176943, 176943, 176943, 258870, 263700, 601969, 601969, 602084
HWBGF15	659687	6803	17 - 220	16555			H0265: 1 and H0580: 1.		
HWBGI01	915603	6804	23 - 178	16556			H0580: 1 and H0370: 1.		
HWBGI13	656308	6805	55 - 276	16557	Ser-25 to Ser-30.		H0580: 2		
HWBGI30	691511	6806	105 - 266	16558			H0580: 2		
HWWAZ06	933736	6807	1 - 213	16559			H0318: 3, S0134: 1, S0218: 1, H0657: 1 and L0758: 1.		
HWWDI03	922463	6808	113 - 301	16560	Val-7 to Leu-22, Cys-26 to Met-34, Gly-57 to Ser-63.		H0657: 2, H0255: 1 and H0318: 1.		
HWWEF06	933697	6809	3 - 128	16561	Gln-24 to Ile-30.		H0657: 2, L0770: 1, L0774: 1, L0666: 1, L0439: 1 and L0777: 1.		
HWWEN10	961741	6810	122 - 436	16562	Pro-9 to Ile-14.		H0657: 2, L0532: 1 and L0666: 1.		
HWWEP56	951811	6811	157 - 426	16563			H0657: 2, L0779: 2, L0766: 1 and L0655: 1.		
HWWFA12	968958	6812	151 - 285	16564	Lys-8 to Gly-19, Gly-37 to Arg-45.		H0657: 1, H0318: 1 and H0445: 1.		
HWWFK07	951819	6813	39 - 503	16565	Val-42 to Leu-56.		H0657: 3 and H0521: 1.		
HWWFU42	961739	6814	44 - 247	16566	Pro-17 to His-23.		H0657: 2		
HYAAB66	463413	6815	62 - 325	16567			H0583: 1 and H0422: 1.		
HYAAC60	731763	6816	349 - 552	16568	Leu-22 to Gln-29, Phe-31 to Ala-37.		S0218: 1 and H0583: 1.		
HYAAD03	923797	6817	229 - 336	16569			H0583: 2		
HYAAD67	664597	6818	67 - 180	16570			H0583: 2 and S0052: 1.		
HYAAD95	920280	6819	299 - 625	16571	Lys-14 to Tyr-31, Pro-39 to Phe-45, Trp-86 to Ala-92.		H0318: 7, H0445: 7, L0748: 6, L0766: 4, H0657: 3, L0751: 3, H0423: 3, H0583:		

								2, H0477: 2, L0761: 2, L0794: 2, L0758: 2, L0599: 2, S0114: 1, L0785: 1, H0254: 1, H0402: 1, H0486: 1, H0575: 1, H0421: 1, H0264: 1, H0059: 1, L0767: 1, L0768: 1 and L0655: 1.			
HYAAF33	915050	6820	136 - 396	16572		Ser-50 to Thr-58, Thr-64 to Gly-72.		H0583: 1, L0766: 1 and H0522: 1.			
HYAAH26	681251	6821	99 - 224	16573		Asn-19 to Tyr-28.		H0583: 1 and H0318: 1.			
HYAAH36	947242	6822	47 - 241	16574		Arg-44 to Cys-50.		H0583: 2			
HYAAI55	674591	6823	19 - 141	16575				L0748: 2, S0114: 1 and H0583: 1.			
HYAAI67	706512	6824	233 - 3	16576		His-2 to Trp-7, Glu-37 to Asn-43.		H0583: 1 and H0305: 1.			
HYAAJ36	744792	6825	1 - 414	16577		Ala-1 to Gly-6.		H0583: 1, H0521: 1, L0779: 1 and L0758: 1.			
HYAAJ89	678728	6826	137 - 283	16578				H0583: 1 and H0179: 1.			
HYAAN31	697590	6827	2 - 181	16579		Gly-20 to Trp-33.		H0583: 2			
HYAAO39	599000	6828	242 - 412	16580				H0583: 1 and S0002: 1.			
HYAAR17	662426	6829	2 - 223	16581				H0583: 2			
HYAAR95	862585	6830	252 - 536	16582		Ile-20 to Lys-25.		H0583: 1, S0002: 1, L0766: 1 and H0423: 1.			
HYAAS08	926017	6831	1 - 312	16583		Arg-1 to Phe-18, Pro-38 to Phe-43.		H0583: 1 and H0341: 1.			
HYAAT50	724047	6832	42 - 413	16584		Ile-3 to Ala-11, Arg-25 to Leu-32, Ser-40 to Cys-47, Leu-101 to Lys-111.		S0134: 1 and H0583: 1.			
HYAAU42	890595	6833	2 - 424	16585		Ser-37 to His-43, Val-45 to Trp-60, Lys-106 to Ser-113.		H0583: 1, L0539: 1 and H0271: 1.			
HYAAU88	786666	6834	125 - 430	16586		His-1 to Glu-8, Asp-14 to Cys-21.		S0218: 1, H0583: 1 and S0216: 1.			
HYAAX05	934878	6835	23 - 190	16587				H0583: 2			
HYAAX17	662439	6836	3 - 140	16588				H0583: 2			

HYAAX65	630213	6837	2 - 217	16589	Gly-1 to Trp-13.	H0583: 2		
HYAAY36	766694	6838	110 - 412	16590	Pro-1 to His-11, Ser-52 to Ala-60.	H0556: 6, S0144: 5, H0255: 22q13.1 4, L0766: 4, L0757: 4, H0650: 3, S0278: 3, H0486: 3, S0344: 3, S0426: 3, L0655: 3, L0747: 3, L0749: 3, H0543: 3, S0134: 2, L0785: 2, H0069: 2, H0318: 2, H0179: 2, L0748: 2, L0756: 2, T0002: 1, H0583: 1, S0116: 1, H0402: 1, H0638: 1, S0358: 1, S0140: 1, H0025: 1, H0575: 1, H0581: 1, H0510: 1, H0271: 1, H0063: 1, H0087: 1, L0381: 1, L0378: 1, L0657: 1, L0659: 1, L0542: 1, L0383: 1, H0521: 1, H0436: 1, S0027: 1, L0744: 1, L0779: 1, L0731: 1, H0445: 1, L0601: 1, H0422: 1 and H0677: 1.		103050, 103050, 124030, 124030, 138981, 182380, 188826, 190040, 190040, 190040
HYABB23	675659	6839	302 - 448	16591		L0754: 3, L0803: 2, L0517: 2q12 2, L0362: 2, H0583: 1, L0773: 1, L0662: 1, H0521: 1 and L0780: 1.	2q12	129490, 167415, 176947
HYABB40	799572	6840	288 - 545	16592	Phe-20 to Ser-29.	L0766: 2, L0747: 2, L0779: 2, L0777: 2, L0755: 2, H0583: 1, S0116: 1, L0800: 1, L0644: 1, L0626: 1, L0375: 1, L0776: 1, L0792: 1, L0663: 1, L0748: 1, L0758: 1, L0593: 1 and H0423: 1.		
HYABB96	692653	6841	3 - 170	16593	Ser-1 to Cys-14, Arg-20 to Lys-31, Leu-34 to Thr-46.	H0583: 1 and H0521: 1.	8	

HYABC02	919212	6842	3 - 179	16594	Tyr-1 to Thr-10, Thr-15 to Cys-21, Glu-29 to Trp-34.	H0583: 2		
HYABC58	924677	6843	92 - 202	16595	Asn-1 to Tyr-9.	H0583: 1 and H0063: 1.		
HYABE67	822985	6844	94 - 315	16596	Arg-11 to His-21, Tyr-46 to Gly-54.	H0583: 3 and L0754: 1.		
HYABE85	697593	6845	447 - 635	16597		H0583: 2, L0764: 1 and L0439: 1.		
HYABG22	811950	6846	3 - 146	16598		H0583: 2		
HYABL55	678864	6847	2 - 418	16599	Thr-12 to Thr-28, Glu-30 to Ala-36, Gly-40 to Arg-48, Ala-61 to Trp-75, Arg-94 to Gln-101, Thr-112 to Asp-117.	H0583: 1 and S0052: 1.		
HYABP53	971448	6848	26 - 637	16600	His-1 to Gly-12, His-33 to Gly-44, Thr-124 to Gly-137, Thr-153 to Thr-158, Arg-188 to Gly-193.	AR054: 47, AR051: 42, AR050: 39, AR089: 1, AR061: 1 H0583: 1 and H0656: 1.		
HYABV14	956236	6849	121 - 588	16601	His-1 to Trp-12, Arg-40 to Ala-45, Pro-50 to His-60, Asn-70 to Arg-76.	H0521: 4, L0766: 3, H0583: 1, H0581: 1, H0522: 1 and H0543: 1.		
HYACG89	724923	6850	231 - 512	16602		S0114: 1, L0002: 1 and H0583: 1.		
HYACI15	674268	6851	149 - 277	16603	Ser-21 to Gly-26.	H0583: 1 and H0576: 1.		
HYACI18	665720	6852	122 - 292	16604	His-25 to Lys-32.	H0583: 1, S0002: 1 and L0748: 1.		
HYACI64	929756	6853	299 - 523	16605	Ser-28 to Pro-33.	H0583: 1 and H0423: 1.		
HYACI95	746317	6854	3 - 284	16606	Gly-1 to His-10, Pro-13 to Arg-21, His-39 to Cys-53, Ser-79 to Lys-92.	H0583: 2		
HYACI53	727948	6855	214 - 375	16607	Gln-1 to Ser-6.	L0748: 4 and H0583: 1.		
HYACF71	760102	6856	275 - 565	16608	Pro-27 to Arg-38.	L0439: 2 and H0583: 1.		

HYACE11	966482	6857	74 - 229	16609	Gly-1 to Gly-7, Gln-36 to Leu-45.	H0583: 1 and L0517: 1.		
HYACD06	974495	6858	145 - 384	16610	Leu-10 to Tyr-28, Arg-39 to Lys-44.	H0583: 1		
HYACC03	923525	6859	199 - 462	16611	Pro-24 to Ser-29, Ser-45 to Gln-50.	H0583: 1 and L0589: 1.		
HYABB43	800006	6860	368 - 21	16612	Lys-16 to Arg-21, Ser-44 to Arg-52.	AR050: 136, AR054: 109, AR051: 95, AR089: 1, AR061: 1 L0805: 2, H0583: 1, L0764: 1, L0375: 1, L0776: 1, L0740: 1, L0731: 1 and L0759: 1.		
HYAAY57	734463	6861	347 - 430	16613		H0583: 1 and L0439: 1.		
HYAAV45	717479	6862	360 - 542	16614	Ala-18 to Gln-26.	H0583: 1 and L0749: 1.		
HYAAU65	909956	6863	2 - 580	16615	Gln-68 to Ser-78, Thr-93 to Ser-101, Pro-119 to Ala-130.	AR089: 2, AR061: 1 L0748: 2 and H0583: 1.		
HYAAT55	731420	6864	3 - 233	16616		H0583: 1 and L0748: 1.		
HYAAT39	929758	6865	392 - 186	16617		L0754: 2 and H0583: 1.		
HYAAN84	782838	6866	164 - 364	16618	Ser-30 to Arg-39.	H0583: 1, L0759: 1 and L0589: 1.		
HYAAL49	973089	6867	115 - 300	16619	Val-13 to Gln-19, His-35 to Gly-42.	H0583: 1		
HYAAL41	887395	6868	3 - 257	16620		AR050: 73, AR054: 55, AR051: 52 H0583: 1		
HYAAL19	668338	6869	517 - 738	16621	Met-15 to Asn-21, Ser-36 to Ser-41.	L0439: 4, L0756: 2, L0594: 2, H0583: 1, L0766: 1, L0438: 1, L0779: 1 and L0758: 1.		
HYAAK77	887044	6870	212 - 727	16622		AR054: 69, AR050: 62, AR051: 57 H0583: 1 and L0745: 1.		
HYAAK74	765252	6871	1 - 177	16623	Cys-1 to Arg-12.	H0583: 1, L0748: 1 and L0749: 1.		



HYAAJ03	923526	6872	148 - 279	16624	Glu-26 to Cys-31.	H0583: 1 and L0777: 1.	
HYAAF78	773433	6873	1 - 219	16625	Arg-17 to Asn-23, Ser-43 to Ile-48.	H0583: 1, L0748: 1 and L0754: 1.	
HYAAD24	677019	6874	2 - 157	16626		H0583: 1 and L0748: 1.	
HYAAC24	677010	6875	186 - 389	16627	Glu-21 to Tyr-31, Lys-58 to Lys-64.	H0583: 1 and L0362: 1.	
HYAAB40	841969	6876	268 - 510	16628	Ile-15 to Ser-20.	H0583: 1 and L0717: 1.	
HWWEW11	965434	6877	298 - 471	16629	Gly-1 to Gly-29.	H0657: 1 and L0664: 1.	
HWWEW11	965426	6878	204 - 374	16630	Ser-1 to Leu-8.	H0657: 1 and L0367: 1.	
HWWEC06	933690	6879	85 - 234	16631	Ser-33 to Gly-43.	L0766: 2, H0657: 1 and L0749: 1.	
HWBGG82	779081	6880	377 - 538	16632		H0580: 1, L0745: 1 and L0600: 1.	
HWBGF04	927284	6881	1 - 489	16633		H0580: 1 and L0750: 1.	
HWBFY46	800638	6882	1 - 270	16634	Arg-5 to Arg-14.	AR054: 2, AR050: 2, AR051: 1 H0580: 1	
HWBEG18	909798	6883	55 - 696	16635	Trp-46 to Lys-51, Pro-109 to Asn-123, Phe-156 to Gly-165.	AR089: 82, AR061: 18 H0580: 1	
HWBEF69	754328	6884	324 - 229	16636		H0580: 1 and L0748: 1.	
HWBEE25	677660	6885	534 - 316	16637		H0580: 1 and L0742: 1.	
HWBEA06	934820	6886	31 - 237	16638	Gln-26 to Ser-31, Pro-34 to Gln-40.	H0580: 1 and L0766: 1.	
HWBDU71	835888	6887	418 - 531	16639		H0580: 1 and L0523: 1.	
HWBDU58	735774	6888	490 - 257	16640	Ser-18 to Asn-23, Thr-30 to Thr-41, Pro-63 to Arg-75.	L0439: 3 and H0580: 1.	
HWBDS59	743462	6889	274 - 447	16641	Pro-11 to Thr-20.	L0749: 2, H0580: 1 and L0747: 1.	22q11.2-qter
HWBDS12	971872	6890	3 - 200	16642	Ile-17 to Glu-37.	H0580: 1, L0775: 1 and L0755: 1.	
HWBDR82	779002	6891	153 - 437	16643	Phe-1 to Arg-13, Ser-21 to Gln-32.	H0580: 1 and L0748: 1.	
HWBDQ58	735769	6892	553 - 744	16644		L0748: 2 and H0580: 1.	
HWBDL82	728805	6893	26 - 355	16645	Pro-64 to Ile-75.	L0439: 2 and H0580: 1.	

						Glu-77 to Asp-88, Leu-101 to Gly-110. Pro-15 to Gly-22.			H0580: 1, L0665: 1 and L0599: 1.	
HWBDK08	958956	6894	247 - 369	16646					H0580: 1 and L0766: 1.	
HWBCV48	721010	6895	136 - 408	16647					H0580: 1 and L0766: 1.	
HWBCU06	935028	6896	240 - 464	16648					H0580: 1 and L0143: 1.	
HWBCS08	909031	6897	2 - 562	16649		Cys-1 to Arg-6, Asp-18 to Ser-30, Cys-37 to Ser-42, Arg-64 to Lys-69, Arg-74 to Val-79, Asp-109 to Asp-115, Val-161 to Lys-166.			AR089: 4, AR061: 1 H0580: 1, L0809: 1 and L0604: 1.	
HWBCH41	868342	6898	175 - 363	16650					H0580: 1, L0766: 1 and L0748: 1.	
HWBCD20	669472	6899	143 - 418	16651		Arg-3 to Ser-17, Pro-33 to Ala-41.			H0580: 1 and L0439: 1.	
HWBCA08	958957	6900	1 - 222	16652		Cys-3 to Ser-10.			L0619: 1 and H0580: 1.	
HWBBY86	637734	6901	198 - 503	16653		Ser-8 to Gly-13, Pro-33 to Ser-39, Asn-96 to Gln-102.			AR051: 12, AR054: 7, AR050: 3 H0580: 1	
	785151	9611	362 - 3	19363		Ser-8 to Gly-13, Pro-33 to Ser-39, Asn-96 to Lys-101.				
HWBBV52	726509	6902	78 - 218	16654		Leu-9 to Met-17.			H0580: 1, L0740: 1 and L0599: 1.	
HWBBU10	964237	6903	8 - 298	16655		Pro-24 to Cys-42, Arg-66 to Pro-71.			L0004: 1, H0580: 1 and L0606: 1.	
HWBBT71	760176	6904	247 - 381	16656		His-2 to Gly-8.			H0580: 1 and L0756: 1.	
HWBBR45	887686	6905	75 - 239	16657		Leu-4 to Asp-15.			AR054: 240, AR050: 238, AR051: 165 H0580: 1	
HWBBQ22	861613	6906	2 - 214	16658		Tyr-17 to Cys-22.			H0580: 1 and L0766: 1.	
HWBBN86	785313	6907	385 - 528	16659					L0748: 3 and H0580: 1.	
HWBBM02	919423	6908	3 - 116	16660					H0580: 1 and L0376: 1.	

HWBBL57	868349	6909	204 - 428	16661			H0580: 1 and L0763: 1.		
HWBBL03	923691	6910	50 - 217	16662	Asn-32 to Thr-39, Gly-46 to Phe-56.		H0580: 1, L0369: 1 and L0517: 1.		
HWBBF60	740125	6911	3 - 257	16663			H0580: 1 and L0754: 1.		
HWBBE52	868358	6912	150 - 365	16664	Arg-19 to Asn-33, Leu-52 to Trp-66.		AR054: 7, AR051: 4, AR050: 2 L0748: 2, H0580: 1, L0772: 1, L0771: 1, L0774: 1, L0776: 1 and L0758: 1.		
HWBBD23	675360	6913	1 - 276	16665	Arg-1 to Gly-8.		H0580: 1 and L0602: 1.		
HWBAX77	771958	6914	126 - 521	16666	Gly-7 to Leu-12, Ser-60 to Cys-66.		H0580: 1 and L0754: 1.		
HWBAT83	780976	6915	1 - 426	16667			H0580: 1 and L0745: 1.		
HWBAS96	796126	6916	1 - 186	16668	Ser-18 to Thr-23.		H0580: 1 and L0748: 1.		
HWBAR29	690422	6917	51 - 302	16669	Lys-15 to Ala-23, Ala-26 to Leu-34, Gly-46 to Cys-56.		H0580: 1 and L0740: 1.		
HWBAQ71	944080	6918	3 - 470	16670	Thr-1 to Ala-11, Thr-24 to Arg-29.		AR089: 3, AR061: 1 H0580: 1 and L0601: 1.		
HWBAQ02	919351	6919	102 - 311	16671	Cys-5 to Gln-13, Asn-24 to Arg-29.		L0779: 2 and H0580: 1.		
HWBAO50	724135	6920	202 - 402	16672	Leu-39 to Thr-44.		L0766: 2 and H0580: 1.		
HWBAO38	709490	6921	195 - 368	16673			L0748: 2 and H0580: 1.		
HWBAK65	747731	6922	277 - 140	16674	Thr-12 to Gly-19.		L0439: 3 and H0580: 1.		
HWBAJ13	975117	6923	1649 - 1440	16675			AR061: 2, AR089: 2 H0580: 1		
HWBAH72	766073	6924	227 - 469	16676			L0439: 2 and H0580: 1.		
HWBAH16	661664	6925	3 - 269	16677	Gln-9 to Asn-14.		H0580: 1, L0748: 1 and L0749: 1.		
HWBAF43	715111	6926	329 - 550	16678	Ser-27 to Arg-33, Thr-61 to Pro-67.		H0580: 1 and L0748: 1.		
HWBAF09	625401	6927	108 - 278	16679			H0580: 1 and L0766: 1.		
HWBAC02	919559	6928	1 - 135	16680	Gln-6 to Asp-21.		H0580: 1 and L0731: 1.		
HWAGV04	926759	6929	69 - 371	16681	Gly-3 to Cys-10, Leu-29 to His-34.		H0581: 1 and L0589: 1.		
HWAGQ02	953013	6930	550 - 185	16682	Cys-31 to Tyr-37,		L0766: 3, L0748: 2, L0785:		

									Lys-90 to Ser-99, Ser-102 to His-109, Gln-112 to Trp-121.		1, H0581: 1, L0763: 1, L0774: 1, L0775: 1, L0375: 1, L0806: 1, L0776: 1, L0749: 1, L0779: 1, L0752: 1, L0758: 1 and L0599: 1.		
HWAGO42	958373	6931	1 - 489	16683					Pro-24 to Val-31.		H0581: 1 and L0800: 1.		
HWAFQ10	961339	6932	733 - 930	16684							L0766: 2 and H0581: 1.		
HWAFM60	868436	6933	1 - 315	16685					Asp-7 to Asn-17, Arg-40 to His-47, Pro-80 to Cys-91.		H0581: 1 and L0766: 1.		
HWAFG12	969605	6934	70 - 417	16686					Ala-1 to Gly-10, Arg-33 to Thr-39, Phe-41 to Gly-50, Asp-59 to Gly-66, Arg-73 to Ser-80.		H0581: 1 and L0655: 1.		
HWAFE87	949950	6935	121 - 420	16687					Gly-7 to Asp-12, Glu-31 to Ser-43, Val-76 to Ser-86.		AR089: 1, AR061: 1 H0581: 1		
HWAFD56	868452	6936	98 - 217	16688					Asp-8 to Cys-15.		H0581: 1 and L0758: 1.		
HWAFD10	963323	6937	3 - 131	16689							H0581: 1 and L0662: 1.		
HWAF47	948858	6938	110 - 358	16690					Ser-16 to Ile-22.		AR089: 4, AR061: 1 H0581: 1		
HWAF405	930990	6939	290 - 544	16691					Gln-1 to Arg-11, Pro-33 to Arg-41, Thr-46 to Gly-52, Arg-54 to Cys-75.		L0751: 2, H0581: 1, L0794: 1 and L0752: 1.		
HWAEZ81	868460	6940	496 - 257	16692					Gln-1 to Lys-8.		H0581: 1		
HWAEZ19	874351	6941	121 - 519	16693					Ser-1 to Ile-7, Phe-27 to Lys-44.		H0581: 1		
HWAEU35	887166	6942	1 - 474	16694					Arg-22 to Arg-36.		AR051: 268, AR054: 153, AR050: 68, AR089: 54, AR061: 9 H0581: 1		
HWAE10	838763	6943	102 - 275	16695					Glu-52 to Lys-58.		H0581: 1 and L0766: 1.		
HWAE25	951965	6944	2 - 793	16696					Asn-11 to His-19, Gly-31 to Val-37.		H0581: 1 and L0593: 1.		

						Thr-65 to Ser-74, Lys-177 to Thr-182, Gly-187 to Asp-199.				
HWAEK27	868494	6945	357 - 578	16697		Asn-1 to Lys-6, Gly-18 to Glu-28, Ser-53 to Thr-58.			H0581: 1 and L0589: 1.	
HWAEK71	931547	6946	2 - 553	16698		Gln-60 to Ala-68, Trp-132 to Ser-138, Lys-156 to Val-163.			AR089: 6, AR061: 1 L0740: 2 and H0581: 1.	
HWAEK08	958115	6947	3 - 716	16699		Leu-32 to Pro-38, Leu-124 to Ala-135.			AR061: 0, AR089: 0 H0581: 1, L0803: 1, L0664: 1, L0439: 1 and L0751: 1.	
HWADQ35	868526	6948	824 - 630	16700					L0759: 4, H0581: 1, L0055: 1, L0773: 1 and L0777: 1.	
HWADO27	682458	6949	222 - 380	16701		Lys-45 to Ser-53.			H0581: 1, L0748: 1 and L0754: 1.	
HWADN42	713272	6950	188 - 391	16702		Ser-10 to Gln-18.			H0581: 1, L0661: 1 and L0750: 1.	
HWADM84	782685	6951	209 - 373	16703					H0581: 1 and L0439: 1.	
HWADI46	891149	6952	2 - 265	16704		Gly-31 to Lys-43.			AR050: 65, AR054: 52, AR051: 41 H0581: 1	
HWADE25	677594	6953	314 - 427	16705					L0748: 2 and H0581: 1.	
HWADD18	665173	6954	83 - 349	16706					L0794: 2, L0665: 2, H0581: 1, L0438: 1, L0439: 1, L0749: 1, L0757: 1 and L0758: 1.	
HWACZ56	733002	6955	3 - 326	16707					H0581: 1 and L0596: 1.	
HWACY70	756888	6956	190 - 552	16708		Glu-1 to Lys-31, Ser-56 to Arg-61.			AR089: 6, AR061: 2 H0581: 1 and L0608: 1.	
HWACS69	774914	6957	391 - 552	16709					H0581: 1 and L0731: 1.	
HWACQ54	729166	6958	80 - 208	16710					H0581: 1 and L0745: 1.	
HWACJ56	733013	6959	205 - 414	16711		Pro-16 to Ile-23.			H0581: 1 and L0748: 1.	
HWACI46	718711	6960	383 - 538	16712					H0581: 1, L0748: 1 and L0581: 1.	
HWACH03	923374	6961	177 - 350	16713		Gly-41 to Ser-46.			H0581: 1, L0748: 1 and	

HWACD30	691565	6962						L0749: 1.			
HWABY68	927387	6963		34 - 249	16714	16715	Pro-5 to Arg-19.	L0747: 3 and H0581: 1. L0777: 2 and H0581: 1.	19q13.3	113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 258501, 600040, 602225, 602225	
HWABV67	751409	6964		145 - 294	16716			H0581: 1 and L0748: 1.			
HWABV34	868535	6965		107 - 280	16717			H0581: 1 and L0747: 1.			
HWABP20	669486	6966		160 - 384	16718		Lys-21 to Arg-27, Ala-29 to Ala-35.	L0748: 2 and H0581: 1.			
HWABP19	951277	6967		33 - 254	16719			H0581: 1 and L0764: 1.			
HWABP02	919442	6968		322 - 423	16720			L0766: 2, H0581: 1 and L0746: 1.			
HWABI13	656767	6969		360 - 602	16721			L0766: 2 and H0581: 1.			
HWABH68	929275	6970		3 - 212	16722			H0581: 1 and L0646: 1.			
HWABG11	949088	6971		1 - 486	16723		Phe-13 to Ile-19.	AR089: 8, AR061: 2 H0581: 1			
HWABD52	726510	6972		4 - 207	16724			L0777: 2 and H0581: 1.			
HWAAAY79	791452	6973		45 - 329	16725		Thr-32 to His-38, Thr-46 to Asn-55.	H0581: 1 and L0598: 1.			
HWAAAY51	973237	6974		48 - 185	16726		Arg-18 to Asn-26.	H0581: 1			
HWAAAX48	721442	6975		144 - 377	16727		Pro-10 to Ser-22, Gly-57 to Cys-62.	H0581: 1, L0805: 1, L0776: 1, L0791: 1, L0663: 1 and L0439: 1.			
HWAAW65	779578	6976		594 - 809	16728		Gly-1 to Arg-14, Leu-32 to Gly-37, Pro-41 to Gly-46.	H0581: 1 and L0748: 1.			
HWAAQ76	887772	6977		3 - 590	16729		His-3 to Ile-9, Leu-13 to Leu-20, Ala-47 to Ser-54, Asn-86 to Pro-93.	AR050: 94, AR051: 77, AR054: 68 L0758: 2, H0581: 1 and L0779: 1.			
HWAAAM30	691878	6978		106 - 336	16730		Asn-36 to Glu-42, Pro-53 to Asp-58.	H0581: 1 and L0731: 1.			
HWAAAL70	757035	6979		3 - 443	16731			H0581: 1 and L0741: 1			

HWAAL41	712141	6980	117 - 383	16732	Arg-18 to Phe-32.	H0581: 1 and L0748: 1.		
HWAALF60	751037	6981	2 - 226	16733		H0581: 1 and L0759: 1.		
HWAALAE31	841973	6982	105 - 248	16734	Arg-1 to Phe-9, Arg-23 to Gly-31.	H0581: 1, L0766: 1 and L0599: 1.		
HWAALB06	935131	6983	181 - 429	16735	Ser-4 to Ala-12, His-21 to Leu-27, Pro-30 to Glu-35.	L0452: 1 and H0581: 1.		
HUUDR34	944903	6984	2 - 658	16736	Lys-6 to Met-14, Lys-60 to Leu-65, Asp-71 to Lys-76, Arg-78 to Ser-88, Pro-96 to His-101, Glu-109 to Glu-123, Thr-138 to Ala-144, Arg-173 to Asp-180.	L0462: 2, H0656: 1 and L0617: 1.	22q13.1	103050, 103050, 124030, 124030, 138981, 182380, 188826, 190040, 190040, 190040
HUUCS12	969325	6985	403 - 687	16737	Ser-6 to Pro-13.	L0748: 3 and H0656: 1.		
HUUCJ02	940813	6986	594 - 121	16738	Gly-11 to Ile-17, Gln-57 to Gly-64.	H0656: 1 and L0163: 1.		
HUJD103	922441	6987	189 - 578	16739	Arg-54 to Ser-61, Pro-79 to Ser-90.	L0523: 2 and H0650: 1.		
HUJDE05	967231	6988	21 - 569	16740	Lys-2 to Ile-11, Asp-76 to Gly-83.	H0650: 1 and L0758: 1.	5q31.1	131400, 147061, 147575, 147575, 147575, 153455, 159000, 181460, 600807, 601596, 602089
HUJCN12	969331	6989	316 - 465	16741		H0650: 1 and L0142: 1.		
HUJBQ04	926196	6990	1 - 120	16742		H0650: 1		
HUJBP01	914512	6991	1 - 330	16743		H0650: 1		
HTYSK94	501001	6992	19 - 285	16744	Arg-28 to Gly-36, Pro-73 to Tyr-80.	H0116: 1		
HTYSK65	500999	6993	126 - 338	16745	His-45 to Tyr-50.	H0116: 1		
HTYSK23	575458	6994	112 - 258	16746		H0116: 1		
HTYND11	965061	6995	93 - 311	16747		L0748: 1 and S0452: 1.		
HTYNC04	926906	6996	167 - 66	16748	Leu-16 to Asn-31.	L0021: 1, L0779: 1 and S0452: 1.		

HTYAA83	537277	6997	424 - 185	16749	Ala-4 to Gly-13.	H0058: 1		
HTXSV06	933377	6998	267 - 461	16750	Gln-20 to Gln-26.	H0556: 1 and L0367: 1.		
HTXSH08	957886	6999	266 - 463	16751		L0749: 4, L0748: 2, L0777: 2, H0556: 1 and L0471: 1.		
HTXSC11	965536	7000	168 - 416	16752	Lys-28 to Met-34, Gln-40 to Ile-45.	H0556: 1		
HTXSA04	926338	7001	174 - 413	16753		H0556: 1, L0783: 1 and L0809: 1.		
HTXRS08	957919	7002	1 - 183	16754	Pro-8 to Arg-19.	H0556: 1 and L0366: 1.		
HTXRA02	918089	7003	2 - 205	16755	Pro-7 to Gly-17.	H0556: 1, L0748: 1 and L0780: 1.		
HTXQS11	965084	7004	1 - 447	16756	Val-20 to Ser-37, Asp-110 to Arg-125.	H0556: 1, L0643: 1 and L0749: 1.		
HTXQO07	952064	7005	1 - 231	16757		H0556: 1 and L0749: 1.		
HTXQM71	869147	7006	192 - 425	16758	Leu-50 to Ile-55.	H0556: 1 and L0766: 1.		
HTXQM07	952067	7007	311 - 445	16759		H0556: 1 and L0805: 1.		
HTXPX72	916162	7008	132 - 458	16760		H0556: 1 and L0748: 1.		
HTXPV03	922905	7009	416 - 664	16761		H0556: 1 and L0745: 1.		
HTXOR95	869249	7010	380 - 592	16762		H0556: 1 and L0748: 1.		
HTXOO15	869261	7011	55 - 273	16763	Pro-49 to Thr-55.	AR089: 1, AR061: 0		
						H0556: 1 and L0752: 1.		
HTXOO12	872368	7012	30 - 395	16764		H0556: 1 and L0761: 1.	12	
HTXOK51	869265	7013	147 - 527	16765	Ser-76 to Gly-82, Gly-89 to Thr-97.	L0362: 2 and H0556: 1.		
HTXNJ60	869299	7014	354 - 677	16766	Pro-42 to Arg-47.	H0556: 1 and L0766: 1.		
HTXNG04	926992	7015	48 - 557	16767	Pro-20 to Ala-25, Lys-53 to Arg-63, Pro-80 to Gly-89, Ser-139 to Asp-156.	L0749: 5, L0748: 3 and H0556: 1.		
HTXNF11	869300	7016	309 - 593	16768		H0556: 1 and L0748: 1.		
HTXNA19	953848	7017	562 - 792	16769		H0556: 1 and L0439: 1.		
HTXNZ01	915250	7018	107 - 223	16770		H0556: 1 and L0562: 1.		
HTXMU37	948611	7019	1 - 204	16771		L0748: 2 and H0556: 1.		
HTXMR30	869312	7020	332 - 577	16772		L0758: 2 and H0556: 1.		
HTXMJ82	841875	7021	2 - 424	16773	Arg-15 to Ser-22,	H0556: 1 and L0596: 1.		



						Ala-30 to Leu-37, Pro-44 to Lys-51, Leu-53 to Arg-65, Pro-123 to Trp-132.					
HTXMC72	875290	7022	127 - 399	16774						H0556: 1 and L0748: 1.	
HTXLS08	958357	7023	1 - 1152	16775		Asp-1 to Gly-8, Leu-14 to Ser-20.				L0766: 9, L0761: 8, L0779: 3, L0809: 2, L0752: 2, H0556: 1, L0772: 1, L0794: 1 and L0745: 1.	
HTXLN70	756630	7024	409 - 663	16776						H0556: 1 and L0748: 1.	
HTXLI10	963602	7025	235 - 471	16777						H0556: 1 and L0794: 1.	
HTXKP30	487401	7026	138 - 335	16778						H0556: 1	
	494070	9612	164 - 3	19364		Asp-13 to Phe-19, Arg-46 to Leu-54.					
HTXKN65	869345	7027	71 - 241	16779		Met-1 to Asn-8, Gln-19 to Ser-24.				H0556: 1 and L0369: 1.	
HTXKM37	869347	7028	24 - 236	16780		Lys-8 to Pro-19.				H0556: 1 and L0768: 1.	
HTXKM24	677101	7029	117 - 284	16781		Lys-6 to Thr-11.				H0556: 1 and L0748: 1.	
HTXKK96	796330	7030	321 - 515	16782		Gly-51 to Pro-65.				H0556: 1 and L0596: 1.	
HTXKK31	697838	7031	208 - 447	16783		Ser-74 to Ile-80.				H0556: 1 and L0756: 1.	
HTXKF02	919683	7032	3 - 251	16784		Leu-2 to Ser-14, Ser-26 to Ala-34, Pro-43 to Gly-49.			11p15.5	H0556: 1, L0743: 1 and L0744: 1.	125852, 126452, 126452, 141900, 141900, 141900, 141900, 141900, 141900, 142000, 142000, 142200, 142250, 142270, 176730, 176730, 176730, 190020, 191290, 192500, 192500, 194071, 194071, 204500, 600856, 601680, 602631, 602631
HTXKC64	746471	7033	203 - 481	16785		Ile-9 to Asn-18.				H0556: 1 and L0748: 1.	
HTXJX77	870446	7034	94 - 606	16786		Gln-25 to Thr-30,				H0556: 1 and L0596: 1.	

HTXJR61	741746	7035	941 - 693	16787	Ser-45 to Lys-54. Lys-1 to Leu-6.	L0439: 3, H0556: 1 and L0747: 1.		
HTXJP17	663123	7036	77 - 334	16788	Arg-24 to Gly-32, Asp-48 to Ser-55, Pro-58 to Glu-64, Glu-69 to His-86.	L0747: 3, L0758: 2, H0556: 1 and L0515: 1.		
HTXJO80	871594	7037	329 - 454	16789		L0748: 2, H0556: 1, L0637: 1 and L0749: 1.		
HTXJO78	773508	7038	145 - 282	16790	Leu-7 to Gly-18, Tyr-20 to Asn-29.	H0556: 1 and L0755: 1.		
HTXJN39	566290	7039	25 - 240	16791	Ala-4 to Glu-9, Asp-31 to Ser-36, Asp-44 to Gln-53.	AR054: 19, AR050: 2, AR051: 1 H0556: 1 and L0592: 1.		
HTXJK20	423763	7040	122 - 349	16792	Lys-1 to Arg-14, Thr-38 to Cys-50.	H0556: 1 and L0591: 1.		
HTXJC08	957757	7041	737 - 450	16793		AR054: 16, AR050: 10, AR051: 2 H0556: 1		
	972481	9613	410 - 727	19365	Gly-23 to Arg-29, Gly-33 to Ser-42, His-51 to Thr-56, Pro-67 to Ser-79, Ser-84 to Arg-91, Pro-100 to Gly-106.			
HTXJA76	767696	7042	222 - 386	16794	Ser-6 to Thr-12.	H0556: 1		
HTXJA32	699152	7043	54 - 344	16795	Ser-2 to Met-7, Pro-18 to Pro-25.	L0599: 2 and H0556: 1.		
HTXGH41	712566	7044	4 - 246	16796	Pro-3 to Gln-8, Val-35 to Asp-40.	H0265: 1 and L0749: 1.		
HTXGE85	783418	7045	1 - 462	16797		L0743: 3, L0744: 2 and H0265: 1.		
HTXFR89	790276	7046	2 - 292	16798	Arg-4 to Cys-16, Pro-18 to Pro-38, Asn-86 to Lys-92.	H0265: 1 and L0750: 1.		
HTXFN90	537392	7047	87 - 374	16799	Gly-26 to Leu-31,	H0265: 1		

HTXFN73	824543	7048	82 - 285	16800	Gln-35 to Gly-41.	H0265: 1	
HTXFN63	745316	7049	96 - 308	16801		H0265: 1	
HTXFN53	537391	7050	42 - 305	16802		H0265: 1	
HTXFN23	537393	7051	37 - 207	16803		H0265: 1	
HTXFN43	537397	7052	28 - 240	16804	Pro-7 to Asn-13, Pro-19 to Tyr-26, Arg-48 to Phe-55.	H0265: 1	
HTXFN20	537398	7053	17 - 217	16805	Lys-11 to Cys-21, Thr-41 to Pro-47, Arg-55 to Thr-60.	H0265: 1	
HTXFG29	689833	7054	79 - 210	16806		H0265: 1	
HTXFF96	796309	7055	543 - 379	16807	Trp-8 to Ala-13, Gly-22 to Ser-28, Met-38 to Pro-45.	H0265: 1	
	796314	9614	133 - 321	19366	Lys-7 to Gly-14, His-16 to Asp-22.		
HTXFF93	934438	7056	370 - 558	16808	Arg-6 to Ser-11, Val-36 to Ser-43.	H0265: 1 and L0748: 1.	
HTXEY18	869406	7057	132 - 392	16809	Pro-28 to Gly-34.	H0265: 1.	
HTXEX83	780277	7058	1 - 342	16810		H0265: 1 and L0748: 1.	
HTXBE90	789161	7059	120 - 368	16811	Ser-8 to Trp-19, Glu-75 to Pro-83.	L0740: 2 and H0265: 1.	
HTXEC96	796561	7060	260 - 132	16812		H0265: 1 and L0748: 1.	
HTXEA45	723401	7061	2 - 301	16813	Pro-2 to Ser-11, Arg-36 to Ser-51.	H0265: 1 and L0596: 1.	
HTXDZ56	733641	7062	155 - 424	16814	Tyr-39 to Tyr-45.	L0748: 2 and H0265: 1.	
HTXDW32	699559	7063	810 - 1070	16815	Ser-58 to Ile-66.	H0265: 1 and L0749: 1.	
HTXDJ77	772473	7064	2 - 202	16816	Thr-13 to Thr-19.	H0265: 1 and L0750: 1.	
HTXDD24	888612	7065	1 - 276	16817		AR054: 15, AR050: 4, AR051: 3 H0265: 1	
HTXCW50	724650	7066	3 - 422	16818	Glu-1 to Asp-9, Lys-29 to Lys-46.	L0809: 4, L0803: 2, L0777: 2, H0265: 1, L0774: 1, L0651: 1, L0749: 1 and L0780: 1.	

HTXCS84	783262	7067	5 - 82	16819	Glu-18 to Ala-24.	H0265: 1		
HTXBT88	529663	7068	17 - 286	16820	Val-1 to Ser-12, Gly-14 to Thr-22, Arg-63 to Ala-71.	H0265: 1		
HTXAW03	921906	7069	92 - 376	16821		H0265: 1, L0769: 1, L0509: 1, L0439: 1, L0747: 1 and L0755: 1.		
HTXAK96	796612	7070	360 - 485	16822	Lys-1 to Trp-8.	H0265: 1 and L0748: 1.		
HTXAJ34	707050	7071	196 - 318	16823	Tyr-13 to Phe-18.	H0265: 1 and L0754: 1.		
HTWL177	839177	7072	1 - 411	16824	Pro-30 to Pro-38.	H0576: 1		
HTWLF58	869478	7073	131 - 433	16825	Pro-51 to Gly-58.	L0766: 1, H0576: 1 and L0779: 1.		
HTWLD61	741610	7074	3 - 218	16826	Ala-6 to Met-16, Pro-39 to Lys-45.	H0576: 1		
HTWLD10	964195	7075	85 - 189	16827		L0803: 1 and H0576: 1.		
HTWLC51	725533	7076	94 - 201	16828		L0748: 2, L0766: 1, H0576: 1 and L0779: 1.		
HTWKZ86	785318	7077	121 - 279	16829	Lys-15 to Ser-20, Glu-28 to Trp-36, Lys-38 to Lys-49.	H0576: 1		
HTWKZ46	718872	7078	160 - 354	16830	Ala-50 to Asn-63.	H0576: 1		
HTWKZ35	494833	7079	2 - 127	16831		H0576: 1		
HTWKZ28	686254	7080	177 - 395	16832	Ser-1 to Val-10, Glu-20 to Ser-29, Pro-54 to Cys-67.	H0576: 1		
HTWKZ27	812689	7081	142 - 303	16833		H0576: 1		
HTWKZ15	659934	7082	233 - 367	16834	Leu-7 to Leu-13, Pro-15 to Cys-20.	H0576: 1		
HTWKT41	712142	7083	25 - 189	16835	Trp-14 to Ser-25.	L0766: 1, H0576: 1 and L0754: 1.		
HTWKF34	703863	7084	174 - 320	16836		L0748: 2 and H0576: 1.		
HTWKB07	952841	7085	91 - 321	16837	Asp-25 to Lys-30.	L0763: 1 and H0576: 1.		
HTWJY36	708338	7086	12 - 251	16838	Pro-27 to Ser-36, Gly-73 to Leu-80.	L0761: 2, L0754: 2, L0766: 1, H0576: 1, L0779: 1, L0780: 1 and L0755: 1.	107280, 107280, 107400, 107400, 122500, 186960, 245200, 601841	

HTWJH08	790185	7087	85 - 207	16839	Gly-3 to Cys-12, Lys-33 to Lys-41.	AR061: 1, AR089: 1 H0576: 1		
	846554	9615	85 - 207	19367	Gly-3 to Cys-12, Lys-33 to Lys-41.			
HTWJF89	805706	7088	45 - 323	16840	Glu-1 to Ser-9, Ser-30 to Ala-36, Gln-61 to Tyr-66.	H0576: 1 and L0748: 1.		
HTWJF50	911448	7089	916 - 1434	16841	Thr-12 to Trp-20, Pro-29 to Arg-35, Leu-51 to Arg-58, Arg-100 to Arg-108, Cys-120 to Arg-125, Pro-150 to Arg-163.	L0766: 1 and H0576: 1.		
HTWJA79	559919	7090	2 - 226	16842	Leu-38 to Lys-43, Ser-52 to Cys-58.	H0576: 1		
HTWFQ19	586124	7091	2 - 196	16843		AR054: 180, AR050: 146, AR051: 125, AR089: 10, AR061: 4 H0436: 1		
HTWFM90	582285	7092	59 - 187	16844	Leu-16 to Ser-29.	H0436: 1		
HTWFM89	786805	7093	110 - 301	16845	Gly-1 to Tyr-13, Arg-26 to Lys-39.	H0436: 1		
HTWFM79	841983	7094	19 - 186	16846	Ser-43 to Tyr-49.	L0766: 1 and H0436: 1.		
HTWFM71	760303	7095	18 - 242	16847	Leu-7 to Leu-14, Pro-16 to Glu-23, Thr-36 to Glu-51.	H0436: 1		
HTWFM48	721587	7096	1 - 114	16848	Val-14 to Leu-27.	H0436: 1		
HTWJF71	869491	7097	346 - 609	16849	Gly-38 to Glu-48.	L0770: 1 and H0436: 1.		
HTWFH75	767251	7098	352 - 498	16850		H0436: 1 and L0748: 1.		
HTWFH73	761686	7099	239 - 460	16851		H0436: 1 and L0777: 1.		
HTWFH42	713667	7100	395 - 523	16852		H0436: 1, L0748: 1 and L0749: 1.		
HTWFG29	800193	7101	1 - 93	16853	Phe-13 to Glu-20.	H0436: 1		
HTWFD63	745010	7102	1 - 183	16854	Lys-21 to Lys-27, Arg-32 to Ser-37.	L0748: 2 and H0436: 1.		
HTWEY89	864553	7103	2 - 229	16855	Met-50 to Glu-63,	H0436: 1 and L0740: 1.	8q13	122560, 214400,

HTWEO90	788859	7104	316 - 522	16856	Ser-70 to Pro-76.	L0745: 9 and H0436: 1.	602476
HTWEJ74	765512	7105	64 - 228	16857		H0436: 1 and L0756: 1.	
HTWEH76	876853	7106	319 - 639	16858	Val-1 to Thr-16.	H0436: 1 and L0601: 1.	
HTWEC75	767264	7107	426 - 581	16859	Lys-1 to Glu-10, Leu-15 to Leu-22, Glu-35 to Asn-41.	L0745: 4, L0750: 2 and H0436: 1.	
HTWDR91	869526	7108	130 - 447	16860		H0436: 1	
HTWDO06	935644	7109	211 - 345	16861	Leu-23 to Gly-32.	L0809: 1 and H0436: 1.	
HTWDK68	753086	7110	253 - 399	16862	Met-36 to Asn-43.	H0436: 1 and L0608: 1.	
HTWDJ42	713869	7111	105 - 269	16863	Gly-5 to His-13, Lys-22 to Glu-27.	H0436: 1 and L0748: 1.	
HTWDI49	723047	7112	138 - 281	16864	Ser-24 to Trp-32.	L0745: 2, H0436: 1 and L0780: 1.	
HTWDE70	844831	7113	188 - 358	16865		H0436: 1	
	859421	9616	123 - 239	19368			
HTWCL86	575978	7114	134 - 229	16866		H0436: 1	
HTWCJ08	959591	7115	201 - 413	16867	Asn-22 to Asp-27, Leu-31 to Lys-36.	H0436: 1 and L0758: 1.	
HTWCG06	935642	7116	215 - 319	16868	Thr-1 to Pro-9.	L0766: 1 and H0436: 1.	
HTWCD06	935646	7117	387 - 542	16869		L0517: 1 and H0436: 1.	
HTWCB69	729244	7118	27 - 290	16870	Gly-32 to Gly-38, Gly-41 to Gln-53, His-58 to Phe-69.	H0436: 1 and L0748: 1.	
HTWBW72	772117	7119	244 - 2	16871		H0436: 1 and L0439: 1.	
HTWBV33	594496	7120	1053 - 769	16872		H0436: 1	
	701754	9617	344 - 189	19369			
	813291	9618	299 - 517	19370	Pro-37 to His-49, Thr-56 to Lys-64.		
HTWBV03	869549	7121	483 - 650	16873		L0766: 5, H0436: 1 and L0740: 1.	139330, 139360, 150250, 164500, 182280, 227646, 261510, 600163, 600971, 601154, 601226, 601267, 601373

HTWBT62	742588	7122	26 - 208	16874	Glu-6 to Lys-13, Thr-29 to Glu-39, Arg-48 to Gln-59.	H0436: 1 and L0748: 1.		
HTWBP67	751752	7123	102 - 221	16875		H0436: 1 and L0747: 1.		
HTWBL08	959619	7124	221 - 418	16876	Asn-6 to Ser-15.	H0436: 1 and L0747: 1.		
HTWBI04	922175	7125	132 - 362	16877	Pro-12 to Gly-20.	L0598: 1 and H0436: 1.		
HTWBF27	683546	7126	82 - 360	16878		H0436: 1 and L0752: 1.		
HTWBE63	745194	7127	181 - 309	16879	Pro-1 to Gly-12.	H0436: 1 and L0753: 1.		
HTWBD84	783120	7128	232 - 477	16880	Leu-61 to His-66.	H0436: 1 and L0748: 1.		
HTWBD61	604245	7129	285 - 569	16881		H0436: 1		
	824129	9619	418 - 167	19371	Ala-49 to Glu-56.			
HTWAM49	722141	7130	235 - 444	16882		H0187: 1 and L0748: 1.		
HTWAM48	518825	7131	33 - 308	16883	Ser-59 to Glu-71.	L0605: 2 and H0187: 1.		
HTWAM25	677506	7132	744 - 289	16884	Thr-1 to Lys-11.	L0758: 5, L0794: 4, L0803: 3, L0744: 2, L0756: 2, L0435: 1, L0804: 1, L0806: 1, L0805: 1, L0776: 1, L0809: 1, L0789: 1, H0187: 1, L0439: 1, L0751: 1, L0779: 1 and L0591: 1.		
HTWAJ11	967845	7133	261 - 443	16885	His-21 to Pro-27.	L0759: 2, L0657: 1 and H0187: 1.		
HTWAE31	725127	7134	3 - 191	16886		H0187: 1 and L0439: 1.		
HTWAB85	522346	7135	89 - 307	16887		H0187: 1		
HTWAB65	533745	7136	151 - 429	16888	Tyr-18 to Lys-31, Ser-50 to Arg-59.	H0187: 1		
HTWAB57	735153	7137	24 - 191	16889	Lys-15 to Ile-20.	H0187: 1		
HTWAB46	522817	7138	87 - 218	16890		H0187: 1		
HTWAB42	714291	7139	23 - 217	16891	Ser-1 to Asp-10, Lys-36 to Glu-43.	H0187: 1		
HTWAB32	524291	7140	187 - 321	16892	Leu-7 to Leu-13, Pro-15 to Cys-20, Pro-23 to Cys-28.	H0187: 1		
HTWAB27	522796	7141	54 - 134	16893		H0187: 1		
HTWAB18	522794	7142	124 - 207	16894		H0187: 1		
HTWAA90	789271	7143	196 - 426	16895	Val-3 to Thr-10,	H0187: 1		

HTWAA79	869563	7144	214 - 405	16896	Glu-31 to Leu-40.	H0187: 1	
HTWAA42	522603	7145	2 - 85	16897	Ser-20 to Leu-28.	H0187: 1	
HTWAA32	522797	7146	281 - 439	16898		H0187: 1	
HTWAA31	915276	7147	77 - 337	16899		H0187: 1	
HTWAA22	425133	7148	48 - 287	16900	Glu-39 to Thr-47.	H0187: 1	
HTWAA17	667166	7149	46 - 276	16901	Ser-17 to Lys-32.	H0187: 1	
HTUAE10	968597	7150	237 - 404	16902		H0185: 1, L0509: 1, L0607: 1 and L0493: 1.	
HTUAA93	522950	7151	1 - 267	16903		H0185: 1	
HTUAA79	773978	7152	196 - 360	16904		H0185: 1	
HTUAA63	522080	7153	3 - 134	16905		H0185: 1	
HTUAA59	556958	7154	151 - 318	16906	Pro-33 to Ser-38.	H0185: 1	
HTUAA55	522805	7155	74 - 226	16907	Thr-4 to Asp-10.	H0185: 1	
HTUAA51	725949	7156	216 - 317	16908	Leu-5 to Phe-11.	L0740: 2 and H0185: 1.	
HTUAA45	526606	7157	3 - 203	16909	Gly-39 to Ile-46.	H0185: 1	
HTUAA42	694535	7158	38 - 115	16910	Gln-15 to Cys-23.	H0185: 1	
HTUAA32	522807	7159	95 - 187	16911	Gln-15 to Phe-20.	H0185: 1	
HTUAA25	575308	7160	168 - 452	16912		L0748: 2 and H0185: 1.	
HTUAA23	575319	7161	165 - 371	16913	Arg-6 to Leu-15, Leu-23 to Gly-28.	H0185: 1	
HTUAA21	575312	7162	2 - 343	16914		H0185: 1	
HTUAA11	967919	7163	57 - 173	16915		H0185: 1	
HTUAA06	960761	7164	229 - 384	16916	Asp-1 to Glu-9, Gly-35 to Gly-42.	H0185: 1	
HTUAA02	921277	7165	178 - 2	16917	Ser-1 to Thr-9, Glu-16 to Leu-22.	H0185: 1	
HTSHI55	576030	7166	129 - 233	16918	His-3 to Tyr-10, Lys-29 to Asn-34.	H0087: 1	
HTSHC81	778008	7167	224 - 370	16919		H0087: 1 and L0602: 1.	14q32.3-qter
HTSHB38	709445	7168	3 - 236	16920	Pro-10 to Ala-16.	L0589: 2 and H0087: 1.	
HTSHB18	666569	7169	20 - 142	16921	Glu-18 to Lys-23, Ser-36 to Arg-41.	H0087: 1, L0438: 1, L0740: 1 and L0758: 1.	
HTSGZ92	975082	7170	1 - 297	16922	Gln-3 to Thr-9.	H0087: 1 and L0809: 1.	
HTSGQ88	576077	7171	3 - 245	16923	Glu-24 to Arg-38.	H0087: 1	



HTSGQ42	576078	7172	1 - 282	16924	Ala-69 to Arg-81. Gly-1 to Glu-6, Pro-15 to Pro-23, Ser-29 to Glu-46, Leu-48 to Asp-66.	H0087: 1		
HTSGM53	728289	7173	199 - 420	16925	Pro-21 to Lys-28.	L0748: 2 and H0087: 1.		
HTSGL89	787027	7174	336 - 539	16926		H0087: 1 and L0753: 1.		
HTSFU94	793056	7175	1 - 267	16927	Asp-64 to Ser-76, Thr-78 to Ala-86.	L0747: 3, H0087: 1 and L0731: 1.		
HTSFF64	747003	7176	2 - 412	16928	Ala-1 to Pro-9, Pro-45 to Pro-55, Pro-63 to Cys-74, Pro-85 to Val-98.	H0087: 1, L0744: 1 and L0731: 1.		
HTSEX79	524280	7177	20 - 253	16929	Gln-16 to Phe-30.	H0087: 1		
HTSEW02	920963	7178	85 - 264	16930	Ser-53 to Phe-59.	L0803: 3, H0087: 1, L0754: 1 and L0749: 1.		
HTSAA20	836021	7179	156 - 350	16931		H0087: 1 and L0748: 1.		
HTOJZ05	869900	7180	2 - 316	16932		H0264: 1		
HTOJV25	869903	9620	472 - 768	19372	Pro-7 to Pro-17.			
HTOJT60	456941	7181	2 - 199	16933	Asn-1 to Ile-11.	H0264: 1		
HTOJT60	740599	7182	185 - 304	16934		H0264: 1 and L0754: 1.		
HTOJN69	869925	7183	2 - 187	16935		H0264: 1 and L0748: 1.		
HTOJM95	795719	7184	506 - 315	16936		H0264: 1		
	796022	9621	66 - 260	19373				
HTOJL36	866492	7185	327 - 662	16937	Ser-9 to His-14, Gly-40 to Thr-46.	H0264: 1		
HTOJF70	457041	7186	208 - 408	16938	Glu-30 to Asp-36.	H0264: 1 and L0748: 1.	22q13.31	250100, 250800, 250800
HTOJB05	932423	7187	1 - 258	16939	Ser-24 to Asp-31.	H0264: 1, L0748: 1 and L0745: 1.		
HTOIZ49	586144	7188	28 - 219	16940		AR054: 35, AR050: 33, AR051: 28 H0264: 1		
HTOIX57	735004	7189	156 - 341	16941	Asn-36 to His-48.	L0748: 2 and H0264: 1.		
HTOIQ30	584928	7190	252 - 407	16942		H0264: 1 and L0749: 1.		
HTOIL74	765840	7191	1 - 384	16943	Thr-53 to Pro-58.	H0264: 1 and L0747: 1.		

							His-103 to Leu-109, Gln-112 to Trp-126.			
HTOK90	557829	7192	130 - 273	16944			Gln-14 to Tyr-22.		H0264: 1	
HTOU84	783212	7193	342 - 500	16945			Gln-1 to Arg-8.		L0754: 2 and H0264: 1.	
HTOH68	753595	7194	201 - 371	16946			Pro-11 to Gly-16.		H0264: 1 and L0605: 1.	
HTOH09	961168	7195	59 - 190	16947					S0005: 1 and H0264: 1.	
HTOF08	959992	7196	162 - 488	16948			Pro-1 to Arg-10.		L0459: 1, H0264: 1, L0744: 1 and L0752: 1.	
HTOLA89	787088	7197	491 - 252	16949			Lys-1 to Lys-7.		H0264: 1 and L0748: 1.	
HTOLA82	844319	7198	41 - 286	16950			Arg-44 to Gly-59.		AR061: 4, AR089: 2	
HTOHZ59	869950	7199	26 - 355	16951			Ser-10 to Gln-16, Asp-28 to Pro-36.		H0264: 1 and L0754: 1.	
HTOHX62	537358	7200	3 - 92	16952			Gln-1 to Ile-15.		H0264: 1, L0517: 1 and L0596: 1.	
HTOHT93	791459	7201	162 - 440	16953			Pro-64 to Thr-70.		AR051: 11, AR054: 1, AR050: 1	
HTOHR03	924976	7202	6 - 329	16954			Arg-13 to Gln-21, Phe-25 to Ser-33, Pro-85 to Lys-92.		H0264: 1	
HTOHN89	956264	7203	167 - 427	16955			Asn-42 to Lys-54.		H0264: 1, L0748: 1 and L0749: 1.	
HTOHI14	659280	7204	119 - 478	16956					H0264: 1	
HTOHH78	963216	7205	544 - 888	16957			Thr-4 to Cys-15, Glu-31 to Arg-36, Gln-68 to Trp-80, Ser-98 to Glu-105.		L0601: 2 and H0264: 1.	
HTOHG68	964961	7206	1 - 183	16958			Ser-10 to Pro-19, Thr-23 to Arg-35, Asn-56 to Arg-61.		H0264: 1 and L0753: 1.	
HTOGU88	558488	7207	100 - 285	16959					H0264: 1	
HTOGU78	529798	7208	52 - 138	16960					H0264: 1	
HTOGU77	523533	7209	40 - 132	16961			Ser-1 to Ser-7.		H0264: 1	
HTOGC91	790438	7210	308 - 463	16962					H0264: 1 and L0439: 1.	
HTOFV57	529614	7211	35 - 184	16963			Asn-1 to Glu-14.		H0264: 1	
HTOFV08	960203	7212	1 - 150	16964			Ala-11 to Tyr-16,		H0264: 1	

HTOFU55	732454	7213	77 - 196	16965	Lys-43 to Pro-50.	H0264: 1 and L0749: 1.		
HTOFT20	527938	7214	1 - 60	16966	Glu-9 to Tyr-16.	H0264: 1		
HTOFS74	765918	7215	46 - 174	16967	Pro-15 to Leu-20.	H0264: 1 and L0599: 1.		
HTOFO18	911756	7216	1179 - 1376	16968	Pro-1 to Trp-13.	H0264: 1		
	911956	9622	980 - 1156	19374	Asn-25 to Leu-34.			
HTOFC06	960546	7217	84 - 266	16969		H0264: 1 and L0803: 1.		
HTOEX28	936543	7218	280 - 513	16970	Arg-15 to Gly-22.	H0264: 1 and L0747: 1.		
HTOEV91	509938	7219	268 - 38	16971	Pro-11 to Tyr-16, Thr-24 to Ser-35.	H0264: 1		
	534071	9623	581 - 408	19375	Thr-31 to Gly-36.			
HTOET61	742164	7220	323 - 445	16972		H0264: 1 and L0766: 1.		
HTOEE28	685375	7221	83 - 259	16973		H0264: 1		
	869988	9624	306 - 530	19376				
HTODM08	960113	7222	2 - 400	16974	Leu-12 to Phe-18.	H0264: 1 and L0755: 1.		
HTODL10	968395	7223	1 - 282	16975	Ser-4 to Glu-14, Gln-16 to Ala-24.	H0264: 1 and L0601: 1.		
HTODD59	738532	7224	287 - 400	16976	Pro-3 to Gln-11.	H0264: 1 and L0754: 1.		
HTODA31	698400	7225	56 - 436	16977	Gln-4 to Ala-19, Ser-63 to Asn-80, Glu-104 to Ile-110, Pro-121 to Lys-127.	L0777: 2 and H0264: 1.		
HTOCK85	521944	7226	1 - 201	16978		H0272: 1		
HTOCK73	870004	7227	103 - 351	16979	Arg-12 to Tyr-19, Tyr-27 to Thr-33, Asn-62 to Ser-71.	H0272: 1		
HTOCK14	529958	7228	2 - 298	16980		H0272: 1		
HTOCK03	925368	7229	2 - 124	16981		H0272: 1		
HTOCA55	732469	7230	20 - 148	16982	Phe-21 to Lys-33.	H0272: 1		
HTOBE60	742315	7231	281 - 469	16983		H0272: 1 and L0748: 1.		
HTOBC63	530283	7232	2 - 190	16984	Ile-1 to Asn-6, Gly-10 to Lys-29.	H0272: 1		
HTOBC26	870011	7233	1 - 159	16985		H0272: 1		
HTOBA33	965151	7234	295 - 525	16986		L0439: 2, H0272: 1 and L0766: 1.		

HTOAT88	530183	7235	268 - 411	16987		H0264: 1	
HTOAT81	530185	7236	1 - 231	16988		H0264: 1	
HTOAT68	530187	7237	11 - 187	16989	Arg-1 to Gln-16.	H0264: 1	
HTOAT66	530188	7238	62 - 208	16990		H0264: 1	
HTOAT63	523754	7239	122 - 292	16991	Ser-1 to Trp-6.	H0264: 1	
HTOAT57	870017	7240	19 - 126	16992	Glu-20 to Arg-27.	H0264: 1	
HTOAT50	723595	7241	3 - 176	16993		H0264: 1	
HTOAT43	529840	7242	52 - 135	16994		H0264: 1	
HTOAT35	521914	7243	2 - 100	16995	Asn-1 to Thr-15.	H0264: 1	
HTOAT28	530191	7244	180 - 326	16996	Lys-7 to Gly-15.	H0264: 1	
HTOAT27	682115	7245	101 - 295	16997	Phe-5 to Ala-10, Glu-12 to Asn-17, Val-21 to Asp-35, Ile-58 to Asp-64.	H0264: 1	
HTOAT06	960581	7246	2 - 241	16998		H0264: 1	
HTOAO63	745545	7247	440 - 634	16999	Arg-1 to Ile-9.	H0264: 1 and L0748: 1.	
HTOAO01	921744	7248	1 - 165	17000		H0264: 1 and L0754: 1.	
HTOAM08	960122	7249	23 - 181	17001	Ser-3 to Thr-11.	H0264: 1 and L0758: 1.	
HTOAL84	783261	7250	2 - 118	17002	Ser-20 to Thr-27.	H0264: 1 and L0748: 1.	
HTOAK39	709579	7251	109 - 435	17003	Pro-83 to Ser-89.	H0264: 1 and L0581: 1.	
HTOAI51	529553	7252	44 - 193	17004		H0264: 1	
HTOAI25	529556	7253	1 - 105	17005		H0264: 1	
HTOAI15	529557	7254	61 - 261	17006		H0264: 1	
HTOAD05	932732	7255	261 - 94	17007		H0264: 1 and L0608: 1.	
HTOAA73	764707	7256	89 - 217	17008		H0264: 1 and L0599: 1.	
HTJNX95	795376	7257	1 - 465	17009	Leu-29 to Lys-36.	H0488: 1 and L0439: 1.	
HTJNT65	771995	7258	195 - 311	17010	Ala-1 to Thr-7.	L0731: 2 and H0488: 1.	
HTJNF11	966217	7259	232 - 582	17011	Ser-5 to Asp-11, Arg-18 to Asn-27, Pro-33 to Glu-39, Ser-44 to Trp-50.	H0488: 1 and L0766: 1.	
HTJMZ89	973076	7260	2 - 181	17012		H0488: 1	
HTJMU86	870312	7261	268 - 408	17013	Ser-1 to Ala-7.	H0488: 1 and L0766: 1.	
HTJMQ90	974496	7262	98 - 223	17014		H0488: 1	
HTJML71	759890	7263	1 - 261	17015	Phe-11 to Thr-21,	H0488: 1 and L0766: 1.	

HTJMF56	733444	7264	257 - 481	17016	Leu-67 to Ser-75.				
HTJAE78	773609	7265	177 - 404	17017	Ala-22 to Tyr-28.			H0488: 1 and L0740: 1.	
HTJAD50	724438	7266	149 - 298	17018	Thr-13 to Lys-18.			H0487: 1	
HTHDS68	753137	7267	3 - 230	17019				H0487: 1 and L0748: 1.	
HTHDR27	578830	7268	150 - 344	17020	Pro-27 to Ser-33, Ser-39 to Pro-44.			H0063: 1 and L0748: 1.	
HTHDQ05	932174	7269	36 - 302	17021				H0063: 1, L0748: 1 and L0749: 1.	
HTHDM10	964906	7270	88 - 228	17022	His-16 to Phe-28, Arg-37 to Lys-43.			H0063: 1	
HTHDL30	578894	7271	3 - 314	17023				H0063: 1 and L0769: 1.	
HTHDJ93	792443	7272	170 - 457	17024	Asp-1 to His-6.			H0063: 1	
HTHDF13	490673	7273	381 - 175	17025	Ala-49 to Asn-54.			L0759: 2 and H0063: 1.	
HTHDE83	516372	7274	279 - 413	17026	Ser-5 to Asp-11.			H0063: 1	
	826819	9625	456 - 304	19377				H0063: 1	
HTHDC07	953604	7275	327 - 533	17027	Gln-13 to Glu-21.			H0063: 1 and L0764: 1.	
HTHCV69	973309	7276	137 - 343	17028	Pro-28 to Cys-39.			H0063: 1	
HTHCU42	578861	7277	3 - 224	17029	Gln-7 to Arg-15, Ser-22 to Cys-29.			H0063: 1	
HTHCO72	578758	7278	177 - 323	17030				H0063: 1	
HTHCO45	722029	7279	1 - 159	17031	Thr-14 to Gly-22, Ser-40 to Glu-45.			H0063: 1	
HTHCK89	694051	7280	276 - 1	17032	Arg-14 to Thr-27, Leu-36 to Gly-42, Arg-51 to Cys-73, Glu-82 to Arg-92.			H0063: 1, L0657: 1 and L0592: 1.	
	870359	9626	1 - 489	19378	Gln-31 to Trp-36, Arg-61 to Lys-80, Pro-93 to Thr-100.				
	870365	9627	219 - 539	19379	Thr-19 to Gly-24.				
HTHCG74	578839	7281	1 - 87	17033				H0063: 1	
HTHBY73	946168	7282	1 - 360	17034	Asp-38 to Gly-44, Cys-92 to Gly-98, Ala-101 to Trp-106.			AR061: 12, AR089: 9 H0063: 1	
HTHBW81	519640	7283	134 - 283	17035	His-40 to Asn-47.			H0063: 1	

625209	9628	485 - 147	19380	Glu-10 to Gln-15.			
HTHBW64	746955	318 - 563	17036	Ser-12 to Lys-20, Ala-31 to His-36.	H0063: 1 and L0754: 1.		
HTHBU25	961627	294 - 554	17037	Phe-20 to Ser-26, Pro-47 to Thr-55.	L0439: 3 and H0063: 1.		
HTHBT36	458387	146 - 310	17038	Asn-15 to Gln-27, Ser-41 to Gly-47.	H0063: 1 and L0748: 1.		
HTHBM85	790305	1 - 483	17039	Gly-1 to Arg-7.	H0063: 1 and L0439: 1.	15q24-q25	118485, 231680, 272800, 272800, 272800, 276700, 602685
HTHBM60	739707	58 - 201	17040	Tyr-21 to Ser-33.	H0063: 1 and L0777: 1.		
HTHBK64	573926	181 - 273	17041	Arg-15 to Leu-20, Gly-24 to Arg-31.	H0063: 1		
HTHBK47	526705	46 - 240	17042		H0063: 1		
HTHBK04	925600	2 - 148	17043	Gly-1 to Arg-9, Gln-15 to Gly-26, Gln-29 to Phe-35.	H0063: 1		
HTHBH32	699557	119 - 589	17044	Thr-7 to Arg-19, Lys-60 to Leu-68, Val-107 to Glu-119.	L0803: 2, L0750: 2, H0063: 1, L0763: 1, L0772: 1 and L0789: 1.		
HTHBG23	410319	3 - 182	17045	Ile-1 to Cys-8, Ser-11 to Leu-22, His-25 to Glu-33.	H0063: 1		
HTHBC07	954440	323 - 213	17046	Ser-9 to Ser-15.	H0063: 1		
HTHBC04	933029	123 - 16	17047		H0063: 1 and L0764: 1.		
HTHAA24	575493	3 - 239	17048	Ser-49 to Asp-54, Lys-56 to Asp-71.	H0062: 1		
HTGGO27	682376	3 - 185	17049	Val-2 to Arg-11.	S0218: 1 and L0754: 1.		
HTGGN71	760059	249 - 428	17050	Phe-1 to Asp-7.	S0218: 1 and L0748: 1.		
HTGGN51	870386	47 - 238	17051		S0218: 1 and L0367: 1.		
HTGFY55	731360	1 - 141	17052	Ala-1 to Ala-7, His-20 to Gly-38.	S0218: 1		
HTGFY05	928205	35 - 145	17053	Leu-7 to His-12.	S0218: 1		
HTGFK70	756534	3 - 131	17054	Gly-7 to Ser-12.	S0218: 1 and L0777: 1.		
HTGEY89	786057	2 - 202	17055	Pro-59 to Trp-67.	S0218: 1		

HTGEY40	711177	7304	76 - 246	17056			S0218: 1		
HTGEX10	963862	7305	301 - 1017	17057	Arg-3 to Ser-9, Arg-11 to Trp-30, Thr-38 to Tyr-49, Thr-101 to Arg-107, Gly-139 to Tyr-146, Tyr-215 to Lys-223.	AR089: 43, AR061: 9 S0218: 1 and L0623: 1.			
HTGEX03	923445	7306	135 - 317	17058	Glu-1 to Arg-10, Ser-26 to Gly-39.	S0218: 1 and L0605: 1.			
HTGEU48	721660	7307	258 - 425	17059	Asp-48 to Phe-55.	S0218: 1 and L0599: 1.			
HTGEG89	786665	7308	28 - 228	17060		S0218: 1 and L0748: 1.			
HTGEG17	662369	7309	254 - 508	17061	Ser-68 to Gly-85.	L0766: 3, S0218: 1, L0789: 1 and L0748: 1.			
HTGED13	656504	7310	119 - 244	17062	Ser-32 to Lys-42.	S0218: 1 and L0748: 1.			
HTGEA37	908606	7311	3 - 122	17063	Pro-21 to Gly-31.	S0218: 1 and L0758: 1.	17q11.2		154275, 162200, 162200, 182138, 239100, 600881, 601954, 602403
HTGDX37	708877	7312	86 - 466	17064		L0748: 2, S0134: 1 and L0749: 1.			
HTGDX10	963854	7313	86 - 316	17065	Ser-8 to Arg-14.	S0134: 1 and L0517: 1.			
HTGDV61	741381	7314	297 - 515	17066		S0134: 1, L0766: 1 and L0749: 1.			
HTGDV52	796065	7315	104 - 364	17067	Asn-13 to Leu-18, Pro-68 to Ser-73.	L0747: 2, S0134: 1, L0439: 1, L0749: 1 and L0756: 1.			
HTGCQ86	784676	7316	3 - 392	17068	Thr-46 to Ser-55.	L0748: 2 and S0134: 1.			
HTGCH60	895628	7317	382 - 134	17069		S0134: 1			
HTGCD55	732247	7318	523 - 678	17070		L0748: 2 and S0134: 1.			
HTGBS94	578786	7319	238 - 399	17071		S0134: 1			
HTGBS70	870405	7320	1 - 120	17072	Glu-14 to Ala-19.	S0134: 1			
HTGBS59	739388	7321	155 - 286	17073		S0134: 1 and L0756: 1.			
HTGBS51	578782	7322	66 - 167	17074		S0134: 1			
HTGBS34	576472	7323	3 - 200	17075		S0134: 1 and L0756: 1.			
HTGBS08	959699	7324	565 - 810	17076	Leu-10 to His-15, Gly-31 to Glu-36, Gln-53 to Gly-65.	L0748: 2 and S0134: 1.			

HTGBR52	727276	7325	230 - 391	17077	Phe-20 to Ser-25.	L0754: 2 and S0134: 1.	16q22	103850, 114835, 121360, 217800, 218030
HTGBN58	738229	7326	114 - 233	17078		S0134: 1 and L0439: 1.		
HTGBL15	660483	7327	225 - 518	17079		S0134: 1 and L0748: 1.		
HTGBH09	625756	7328	7 - 126	17080	Glu-29 to Arg-40.	L0598: 2 and S0134: 1.		
HTGBE67	751525	7329	55 - 228	17081		S0134: 1		
HTGBE59	578807	7330	27 - 185	17082	Lys-1 to Lys-7.	S0134: 1		
HTGBE05	932168	7331	127 - 375	17083	Pro-54 to Pro-59.	S0134: 1		
HTGAZ86	785594	7332	96 - 239	17084		S0134: 1 and L0748: 1.		
HTGAZ75	766583	7333	342 - 479	17085		S0134: 1 and L0748: 1.		
HTGAY27	683556	7334	31 - 252	17086		L0367: 2, S0134: 1, L0370: 1, L0652: 1, L0748: 1 and L0605: 1.		
HTGAX83	781275	7335	1 - 210	17087	Asn-18 to Cys-24, Arg-57 to Pro-70.	S0134: 1 and L0756: 1.		
HTGAW78	773666	7336	199 - 417	17088	Leu-43 to Thr-48.	S0134: 1 and L0766: 1.		
HTGAT92	496307	7337	503 - 297	17089		S0134: 1 and L0766: 1.		
HTGAT55	732248	7338	162 - 446	17090	Pro-23 to Pro-32, Arg-46 to Trp-51.	L0749: 2 and S0134: 1.		
HTGAT16	919524	7339	141 - 356	17091		S0134: 1 and L0748: 1.		
HTGAT01	870424	7340	67 - 372	17092		S0134: 1 and L0766: 1.		
HTGAS15	870423	7341	14 - 223	17093	Lys-11 to Cys-18.	S0134: 1, L0756: 1 and L0759: 1.		
HTGAR44	716740	7342	22 - 309	17094	Trp-49 to Ala-54, His-62 to Asp-71, Gln-88 to Ser-96.	S0134: 1 and L0581: 1.		
HTGAK39	705634	7343	3 - 173	17095	Pro-31 to Gln-36.	S0134: 1 and L0766: 1.		
HTGAJ86	785672	7344	3 - 113	17096	Leu-15 to Arg-24.	S0134: 1 and L0749: 1.		
HTGAJ73	764598	7345	194 - 430	17097	Arg-26 to Glu-31, Gly-51 to Gln-59.	S0134: 1 and L0748: 1.		
HTGAJ96	796541	7346	349 - 618	17098	Leu-6 to Gly-11.	S0134: 1, L0748: 1 and L0756: 1.		
HTGAI15	870441	7347	214 - 462	17099		S0134: 1 and L0749: 1.		
HTGAI13	955227	7348	178 - 387	17100	Asn-29 to Lys-37.	S0134: 1 and L0748: 1.		



HTGAD62	754052	7349	1 - 126	17101			S0134: 1 and L0731: 1.		
HTGAD16	567432	7350	204 - 554	17102	Gln-29 to Phe-35, Pro-73 to Pro-79, Pro-86 to Pro-99.		AR051: 22, AR050: 19, AR054: 17 S0134: 1		
HTGAD05	932378	7351	223 - 372	17103	Ala-13 to Leu-23, Ala-30 to Asp-40.		L0608: 2 and S0134: 1.		
HTGAC17	664513	7352	2 - 220	17104	Pro-23 to His-28, Ser-65 to Arg-70.		S0134: 1, L0790: 1 and L0740: 1.		
HTGAA80	574099	7353	119 - 277	17105	Pro-10 to Gln-24.		S0134: 1		
HTGAA44	574114	7354	42 - 266	17106	Ser-2 to Glu-10, Lys-18 to Gly-28.		S0134: 1		
HTDAC74	765656	7355	6 - 311	17107	His-1 to Trp-6, Arg-36 to Gly-67, Pro-73 to Gln-82.		L0361: 2, H0477: 1 and L0601: 1.		
HTDAB18	870746	7356	339 - 659	17108	Gly-10 to Ser-17.		H0477: 1 and L0803: 1.		
HTBAB07	954434	7357	3 - 224	17109	Gln-1 to Met-6, Pro-9 to Asp-14, Glu-36 to Trp-45, Arg-47 to Glu-58.		H0075: 1 and L0589: 1.		
HTBAA86	785846	7358	160 - 420	17110	His-1 to Ala-8.		H0075: 1		
HTAJPI2	969518	7359	438 - 79	17111	Pro-5 to Arg-10, Gly-71 to Arg-76.		H0635: 1, L0772: 1 and L0662: 1.		
HTAJD72	880561	7360	237 - 88	17112			H0635: 1 and L0748: 1.		
HTAIY90	973870	7361	202 - 411	17113	Arg-23 to Trp-48.		H0635: 1		
HTAIQ05	930947	7362	147 - 359	17114	Ser-35 to Ile-41.		H0635: 1 and L0070: 1.		
HTAIG58	838701	7363	288 - 452	17115			L0455: 2 and H0635: 1.		
HTAIF22	910040	7364	179 - 457	17116			AR061: 4, AR089: 3 H0635: 1		
HTAIF11	965738	7365	3 - 461	17117	Glu-1 to Arg-7, His-87 to Gln-95.		H0635: 1		
HTAHZ02	918304	7366	65 - 277	17118			H0635: 1		
HTAGB16	870855	7367	249 - 569	17119	His-16 to Trp-25, Asp-55 to Gly-63.		H0635: 1 and L0748: 1.		
HTAFC92	790991	7368	113 - 418	17120			AR050: 26, AR051: 23, AR054: 22 H0069: 1		

HTAEV23	959129	7369	823 - 329	17121	Leu-7 to Lys-16, Thr-31 to Arg-41, Lys-54 to Asn-61, Ser-89 to His-104, Lys-126 to Lys-131.	AR061: 6, AR089: 4 H0069: 1		
HTAEP05	932459	7370	52 - 228	17122	Arg-41 to Glu-46, Glu-49 to Arg-59.	H0069: 1, L0370: 1, L0776: 1 and L0758: 1.		
HTAEK41	870858	7371	1 - 306	17123	Gly-1 to Arg-7.	H0069: 1	2q37.2	
HTAEF68	753597	7372	1 - 168	17124	Thr-27 to Ser-40.	H0069: 1 and L0439: 1.		
HTADW88	425065	7373	114 - 221	17125		H0069: 1		
HTADW52	537376	7374	63 - 170	17126	Trp-1 to Gly-7.	H0069: 1		
HTADO10	968307	7375	3 - 161	17127		H0069: 1 and L0438: 1.		
HTADB68	753598	7376	3 - 134	17128	Pro-6 to Lys-17.	H0069: 1 and L0748: 1.		
HTACX05	932467	7377	419 - 661	17129	Ser-16 to Gly-22.	H0069: 1 and L0750: 1.		
HTACW82	778852	7378	3 - 134	17130	Ser-1 to Gly-15.	H0069: 1 and L0748: 1.		
HTABK47	720684	7379	161 - 526	17131		L0749: 2, H0069: 1 and L0748: 1.		
HTABE12	971524	7380	98 - 187	17132		H0069: 1 and L0748: 1.		
HTAAO12	972231	7381	64 - 291	17133		H0069: 1 and L0643: 1.		
HTAAB06	960796	7382	110 - 15	17134	Ser-1 to Gly-9, Pro-12 to Gly-25, Pro-27 to Glu-32.	L0518: 4 and H0069: 1.		
HTAAA45	518652	7383	299 - 123	17135	Asn-6 to Ser-11, Pro-28 to Trp-37, Thr-39 to Lys-50.	H0069: 1		
HTAAA31	693527	7384	130 - 2	17136	Phe-19 to Gln-24.	H0069: 1 and L0740: 1.		
HT4AY23	973773	7385	2 - 169	17137	Pro-2 to Cys-18, Phe-22 to Gly-29.	H0141: 1		
HT3TA67	752169	7386	1 - 483	17138	Gln-1 to Ser-9, Ser-43 to Glu-53, Leu-84 to Phe-92, Leu-96 to Ile-101.	L0439: 3 and H0223: 1.		
HT3SH28	508061	7387	1 - 210	17139	Gln-16 to Ser-21, Thr-48 to Lys-56.	H0222: 1		
HT3SA81	589206	7388	3 - 272	17140	Pro-27 to Ser-35, Pro-51 to Trp-58.	H0222: 1	1q21	104770, 107670, 110700, 135940,

									145001, 146790, 152445, 152445, 159001, 174000, 179755, 182860, 182860, 182860, 191315, 230800, 230800, 266200, 600897, 601105, 601412, 601652, 602491
HT3SA80	781631	7389	134 - 349	17141		Gly-27 to Ala-33.	H0222: 1		
HT3SA71	766391	7390	54 - 326	17142		Gln-20 to Phe-26, Val-73 to Asn-91.	H0222: 1		
HT3SA56	522757	7391	233 - 418	17143		Asn-32 to Lys-43.	H0222: 1		
HT3BK75	766488	7392	1 - 273	17144			H0159: 1 and L0743: 1.		
HT3BF33	527782	7393	80 - 181	17145		Val-27 to Ser-33.	H0159: 1		
HT2TA82	522751	7394	77 - 160	17146			H0221: 1		
HT2TA37	522754	7395	20 - 193	17147		Glu-38 to Ser-44.	H0221: 1		
HT2SA86	524290	7396	101 - 265	17148		Ser-9 to Ser-14, Glu-30 to Ile-36, Tyr-38 to His-43.	H0220: 1		
HT2SA63	518341	7397	37 - 171	17149			H0220: 1		
HT2SA50	522771	7398	180 - 326	17150		Pro-1 to Asn-7, Gly-23 to Ile-28.	L0748: 2 and H0220: 1.		
HT2SA48	508077	7399	52 - 273	17151		Gly-25 to His-31.	H0220: 1		
HT2SA47	578704	7400	110 - 247	17152			H0220: 1		
HT2SA38	840184	7401	21 - 155	17153			H0220: 1		
HT2SA37	695038	7402	2 - 97	17154			H0220: 1		
HT2SA26	522770	7403	403 - 272	17155		Lys-1 to Leu-11.	H0220: 1 and L0439: 1.		
HT2SA13	870917	7404	124 - 336	17156		Glu-1 to Val-11, Leu-34 to Tyr-44.	H0220: 1		
HT1TB40	575355	7405	114 - 251	17157			H0219: 1		
HSYDH60	949156	7406	115 - 282	17158		Pro-20 to Ser-25, Phe-49 to Trp-54.	L0731: 2, H0551: 1, L0747: 1 and L0750: 1.		
HSYCV01	940661	7408	1 - 522	17160		Thr-11 to Arg-16.	H0551: 1 and L0745: 1. H0551: 1 and L0740: 1.		

HSYCS04	926943	7409	247 - 134	17161			H0551: 1 and L0542: 1.		
HSYBZ51	725586	7410	2 - 388	17162			H0551: 1 and L0752: 1.		
HSYBX42	713630	7411	1 - 210	17163		Arg-10 to Arg-20, Ala-35 to Gly-54.	H0551: 1 and L0601: 1.		
HSYBW55	731627	7412	245 - 532	17164		Ile-1 to Asn-10.	H0551: 1 and L0740: 1.		
HSYBK77	772067	7413	59 - 541	17165			H0551: 1, L0740: 1 and L0777: 1.		
HSYBH70	756492	7414	89 - 475	17166		Val-1 to Asp-6, Val-10 to Asn-20, Gly-33 to Asn-46, Glu-57 to Ser-62, Ala-69 to Gln-74, Asp-90 to Ser-100.	L0439: 2, H0551: 1 and L0745: 1.		
HSYBH16	661807	7415	2 - 571	17167		Pro-10 to Arg-16.	H0551: 1, L0747: 1 and L0777: 1.		
HSYAV79	928403	7416	85 - 408	17168			H0551: 1 and L0766: 1.		
HSYAU07	953032	7417	1 - 216	17169			H0551: 1, L0779: 1, L0592: 1 and L0608: 1.		
HSYAF81	493771	7418	134 - 3	17170		Leu-22 to Ala-28, Lys-33 to Arg-44.	H0551: 1		
HSMBD15	659891	7419	2 - 421	17171		Ser-36 to Thr-42.	S0298: 1 and L0740: 1.	19q	
HSMBC78	917244	7420	374 - 610	17172			S0298: 1 and L0759: 1.		
HSMBA83	780932	7421	9 - 239	17173		Pro-9 to Trp-16, Pro-55 to Leu-61, Asn-70 to Gly-77.	S0298: 1 and L0756: 1.		
HSMBA39	715630	7422	166 - 363	17174			L0770: 2, L0749: 2, S0298: 1, L0653: 1, L0776: 1, L0659: 1 and L0789: 1.		
HSAZQ69	754362	7423	170 - 298	17175			S0114: 1 and L0754: 1.		
HSAZP83	780400	7424	283 - 510	17176		Arg-15 to Ile-23, Thr-33 to Phe-39.	S0114: 1 and L0745: 1.		
HSAZP65	747422	7425	15 - 284	17177		Thr-8 to Trp-13.	S0114: 1 and L0754: 1.		
HSAZI64	746074	7426	326 - 517	17178		Leu-9 to His-14.	S0114: 1 and L0756: 1.		
HSAZI53	727757	7427	239 - 337	17179			L0748: 2 and S0114: 1.		
HSAZG52	726195	7428	274 - 396	17180		Ile-16 to Gly-21.	L0754: 2 and S0114: 1.		
HSAZG23	950023	7429	120 - 467	17181			AR089: 40, AR061: 7		

	963220	9629	466 - 152	19381	Pro-13 to Asp-20, Thr-27 to Arg-32, Lys-53 to Trp-59, Pro-65 to Gly-70, Gly-77 to Gly-86.	L0523: 2, S0114: 1, L0748: 1 and L0749: 1.		
HSZA42	866817	7430	136 - 324	17182	Ser-16 to Lys-21.	S0114: 1		
HSZA39	705365	7431	131 - 328	17183	Ile-15 to His-21.	S0114: 1 and L0594: 1.		
HSZA06	935451	7432	173 - 364	17184	Gln-9 to Leu-16.	S0114: 1		
HSAYT37	708803	7433	170 - 316	17185	His-23 to Arg-29.	S0114: 1 and L0748: 1.		
HSAYT29	866821	7434	343 - 585	17186		S0114: 1 and L0530: 1.		
HSAYR63	744333	7435	1 - 318	17187		S0114: 1 and L0748: 1.		
HSAYO42	713793	7436	169 - 405	17188	Arg-8 to Phe-16, Gln-25 to Gly-31, Gln-37 to Asn-45.	S0114: 1 and L0754: 1.		
HSAYK93	791546	7437	215 - 433	17189	Arg-16 to His-25, Arg-47 to Phe-57, Pro-60 to Ser-68.	L0749: 2 and S0114: 1.		
HSAXS16	661933	7438	1 - 165	17190	Lys-40 to Ser-45, Cys-49 to Arg-55.	S0114: 1 and L0748: 1.		
HSAXM08	866838	7439	343 - 648	17191	Val-34 to Asp-39, Ser-73 to Ser-87, Lys-93 to Arg-100.	S0114: 1		
	958886	9630	212 - 499	19382				
HSAXJ95	721825	7440	135 - 446	17192		S0114: 1 and L0439: 1.		
HSAXJ93	792516	7441	301 - 453	17193	Glu-6 to Lys-12.	S0114: 1 and L0757: 1.		
HSAXI05	932387	7442	151 - 357	17194	Gln-6 to Asn-20, Val-22 to Thr-36.	S0114: 1 and L0756: 1.		
HSAXH85	784475	7443	32 - 181	17195		S0114: 1 and L0748: 1.		
HSAXG45	457077	7444	67 - 243	17196	Gln-13 to Ser-21.	S0114: 1 and L0756: 1.		
HSAXE42	714040	7445	3 - 227	17197		L0742: 2 and S0114: 1.		
HSAXE33	702673	7446	131 - 334	17198		S0114: 1 and L0753: 1.		
HSAXC55	732368	7447	363 - 202	17199	Lys-24 to Glu-30, Ser-46 to Gln-54.	S0114: 1 and L0600: 1.		
HSAXB89	787069	7448	102 - 224	17200	Leu-2 to Asp-12.	S0114: 1 and L0745: 1.		

HSAWY92	792888	7449	114 - 389	17201	Leu-2 to Thr-7.	S0114: 1, L0748: 1 and L0749: 1.		
HSAWY81	574184	7450	21 - 239	17202	Tyr-21 to Arg-26, Val-48 to Ala-54.	S0114: 1		
HSAWY79	574182	7451	1 - 204	17203	His-56 to Ser-62.	S0114: 1		
HSAWY33	866861	7452	85 - 222	17204		S0114: 1 and L0592: 1.		
HSAWY07	953851	7453	241 - 381	17205		S0114: 1		
HSAWW74	765818	7454	40 - 120	17206		S0114: 1 and L0439: 1.	9p22.2	
HSAWU12	968804	7455	72 - 368	17207	Ile-1 to Leu-8, Ser-31 to Thr-40, Glu-69 to Pro-80.	S0114: 1 and L0748: 1.		
HSAWS74	765819	7456	166 - 345	17208	Asn-44 to Arg-57.	S0114: 1 and L0595: 1.		
HSAWS40	711441	7457	37 - 159	17209		S0114: 1 and L0748: 1.		
HSAWR08	959943	7458	3 - 359	17210	Asn-13 to Lys-20, Val-92 to Arg-98.	L0758: 3 and S0114: 1.		
HSAWO08	959938	7459	176 - 319	17211	Ser-20 to Leu-28.	S0114: 1 and L0717: 1.		
HSAWL77	772444	7460	175 - 285	17212		L0748: 4 and S0114: 1.		
HSAWL68	753569	7461	143 - 292	17213	Gly-5 to Glu-10.	S0114: 1 and L0750: 1.		
HSAWK67	526767	7462	212 - 361	17214		S0114: 1		
HSAWK32	418690	7463	14 - 220	17215		S0114: 1		
HSAWK21	954897	7464	14 - 283	17216	Glu-51 to Asn-61.	S0114: 1		
HSAWK20	866872	7465	134 - 307	17217		S0114: 1		
HSAWI13	971727	7466	273 - 539	17218	Pro-15 to Phe-22, Gly-46 to His-55.	S0114: 1, L0779: 1 and L0591: 1.		
HSAWI11	964949	7467	167 - 322	17219		S0114: 1 and L0754: 1.		
HSAWG44	716820	7468	146 - 346	17220	Leu-3 to Lys-9.	L0753: 2, S0114: 1 and L0521: 1.		
HSAWF86	675220	7469	38 - 253	17221		S0114: 1 and L0748: 1.		
HSAWF52	728598	7470	2 - 328	17222		S0114: 1 and L0745: 1.		
HSAWD34	706928	7471	194 - 349	17223		S0114: 1 and L0740: 1.		
HSAWD24	677435	7472	3 - 236	17224		S0114: 1 and L0748: 1.		
HSAWD15	660572	7473	316 - 447	17225		S0114: 1, L0438: 1 and L0439: 1.		
HSAWC55	866890	7474	102 - 347	17226	Ser-1 to Gln-12.	S0114: 1		
HSAWB70	757409	7475	12 - 170	17227		S0114: 1 and L0748: 1.		

HSADVZ82	881166	7476	115 - 291	17228			S0114: 1 and L0748: 1.		
HSADVZ63	574195	7477	113 - 253	17229	Thr-5 to Thr-10.		S0114: 1		
HSAVY10	968230	7478	36 - 212	17230			S0114: 1 and L0601: 1.		
HSAVY02	920721	7479	81 - 422	17231	Thr-11 to Ser-18, Leu-56 to Gln-70.		S0114: 1, L0527: 1 and L0682: 1.		
HSADVX22	674919	7480	116 - 247	17232			S0114: 1 and L0748: 1.		
HSAVW13	862754	7481	115 - 225	17233			S0114: 1 and L0748: 1.		
HSADV36	866886	7482	2 - 208	17234			S0114: 1, L0748: 1 and L0361: 1.		
HSAVS48	721856	7483	21 - 131	17235			S0114: 1 and L0746: 1.		
HSAVQ73	929276	7484	501 - 695	17236	Leu-47 to Asp-61.		S0114: 1 and L0604: 1.	11q23.3	176000, 261640, 602574, 602574
HSAVP56	733616	7485	3 - 206	17237			S0114: 1 and L0748: 1.		
HSAVO05	932379	7486	35 - 253	17238	Ser-26 to Cys-33, Gly-53 to Pro-62.		S0114: 1 and L0773: 1.		
HSAVN72	574129	7487	3 - 296	17239			S0114: 1 and L0748: 1.		
HSAVN48	526505	7488	1 - 144	17240			S0114: 1		
HSAVN24	574106	7489	2 - 112	17241	Gln-1 to Trp-16, His-18 to Ser-26.		S0114: 1		
HSAVK84	783183	7490	127 - 246	17242			S0114: 1 and L0748: 1.		
HSAVI84	783182	7491	84 - 233	17243			L0748: 3, S0114: 1, L0740: 1 and L0749: 1.		
HSAVI53	728361	7492	1 - 219	17244	Lys-1 to Leu-25.		L0605: 2 and S0114: 1.		
HSAVG96	796544	7493	86 - 238	17245			S0114: 1 and L0598: 1.		
HSAVF17	664515	7494	221 - 313	17246	Asn-19 to Phe-24.		S0114: 1, L0766: 1, L0665: 1 and L0748: 1.		
HSAVE61	742076	7495	238 - 447	17247	Gly-43 to Ser-57.		S0114: 1 and L0599: 1.		
HSAVA79	781800	7496	1 - 111	17248	Val-2 to Gln-7.		S0114: 1 and L0731: 1.		
HSAVA22	674977	7497	79 - 189	17249	Phe-17 to Gln-23.		S0114: 1, L0521: 1 and L0748: 1.		
HSAUZ11	967609	7498	42 - 338	17250	Arg-13 to Gly-19.		S0114: 1 and L0766: 1.		
HSAUW24	679279	7499	57 - 341	17251	Tyr-46 to Phe-51.		S0114: 1 and L0748: 1.		
HSAUU25	679278	7500	315 - 659	17252	Asn-32 to Pro-40, Ser-49 to Cys-54.		L0748: 3, L0749: 3, L0596: 2 and S0114: 1.		
HSAUQ81	866192	7501	49 - 309	17253			AR051: 41, AR050: 27,		

	899273	9631	201 - 389	19383			AR054: 22 S0114: 1 and L0766: 1.	
HSAUQ54	730928	7502	161 - 373	17254			S0114: 1 and L0748: 1.	
HSAUQ44	716847	7503	61 - 201	17255	Pro-16 to Phe-22.		S0114: 1 and L0754: 1.	
HSAUL84	908440	7504	3 - 302	17256	Ala-23 to Asp-28, Gln-53 to Tyr-60.		AR061: 1, AR089: 1 S0114: 1 and L0686: 1.	
HSAUK72	766240	7505	110 - 280	17257	Pro-11 to Ser-17.		S0114: 1 and L0591: 1.	
HSAUK48	883205	7506	2 - 238	17258	Pro-5 to Gly-15, Ala-35 to Gln-40.		S0114: 1 and L0750: 1.	
HSAUI23	422961	7507	485 - 129	17259			L0789: 2, S0114: 1, L0748: 1 and L0599: 1.	
	843427	9632	405 - 608	19384	Leu-3 to Gly-11, Glu-14 to Ala-21.			
HSAUH06	954543	7508	2 - 211	17260			S0114: 1 and L0599: 1.	
HSAUH02	917314	7509	3 - 224	17261			S0114: 1, L0749: 1 and L0589: 1.	
HSAUG74	765859	7510	358 - 483	17262			S0114: 1, L0740: 1 and L0747: 1.	
HSAUD02	920827	7511	37 - 237	17263			S0114: 1 and L0748: 1.	
HSAUB69	514840	7512	179 - 406	17264	Gly-15 to Lys-20.		S0114: 1	
	567319	9633	50 - 229	19385				
HSAUB39	705677	7513	157 - 357	17265	Lys-23 to Thr-35.		S0114: 1 and L0748: 1.	
HSATZ81	778268	7514	101 - 268	17266			L0745: 2 and S0114: 1.	
HSATY22	674986	7515	3 - 401	17267	Glu-31 to Tyr-43, Pro-94 to Arg-108.		L0779: 4, L0758: 2, S0114: 1 and L0749: 1.	
HSATW91	790394	7516	223 - 333	17268			S0114: 1 and L0748: 1.	
HSATW51	725879	7517	284 - 529	17269	Leu-12 to Lys-31.		S0114: 1 and L0740: 1.	
HSATV96	843424	7518	526 - 681	17270			S0114: 1 and L0748: 1.	
HSATS25	866949	7519	2 - 184	17271	Lys-36 to Ile-41, Val-56 to Lys-61.		S0114: 1, L0766: 1 and L0779: 1.	
HSATQ55	732406	7520	57 - 350	17272	Asn-3 to Ser-8, Asn-16 to His-24, Phe-42 to Gly-48, Arg-71 to Lys-81, Gly-88 to Gly-98.		S0114: 1 and L0748: 1.	



HSA64	862436	7521	356 - 640	17273	Gly-1 to Gly-8, Ser-26 to Ala-39, Ser-52 to Arg-58, Ser-63 to Leu-71, Ala-90 to Ser-95.	L0747: 3, L0756: 2, S0114: 1 and L0750: 1.		
HSATM19	866954	7522	281 - 448	17274		S0114: 1 and L0748: 1.		
HSATM09	456326	7523	42 - 176	17275		S0114: 1 and L0599: 1.		
HSATL02	920825	7524	3 - 227	17276	Arg-1 to Asn-8, Glu-10 to Asp-16.	L0518: 3 and S0114: 1.		
HSATIS8	866955	7525	124 - 429	17277	Pro-51 to Pro-58.	S0114: 1 and L0509: 1.		
HSATE53	728414	7526	224 - 448	17278		L0748: 3 and S0114: 1.		
HSATC79	602167	7527	269 - 424	17279	Ser-14 to Thr-23.	S0114: 1 and L0600: 1.		
HSATC72	761511	7528	219 - 332	17280	Asp-14 to Thr-20.	L0731: 2 and S0114: 1.		
HPSAD92	790524	7529	77 - 298	17281		H0074: 1 and L0748: 1.		
HPSAB26	429558	7530	142 - 282	17282	Asp-1 to Gly-7, Pro-41 to Gln-47.	H0074: 1		
HPSAB24	518747	7531	171 - 341	17283	Pro-5 to Ala-13, Pro-15 to Thr-24.	H0074: 1		
HPSAB15	503600	7532	126 - 401	17284		L0748: 2, L0749: 2 and H0074: 1.		
HPSAA94	793000	7533	356 - 75	17285		H0074: 1		
HPSAA93	867387	7534	2 - 178	17286		H0074: 1		
HPSAA91	503543	7535	275 - 6	17287	Ser-31 to Pro-37, Pro-52 to Trp-60, Leu-66 to Leu-71.	H0074: 1		
HPSAA75	503544	7536	317 - 138	17288		H0074: 1 and L0748: 1.		
HPSAA41	503569	7537	257 - 355	17289	Leu-1 to Asn-11.	H0074: 1		
HPSAA30	503567	7538	29 - 253	17290	Val-19 to Met-29.	L0766: 3 and H0074: 1.		
HPSAA03	960941	7539	529 - 362	17291		H0074: 1		
HNNTA24	911178	7540	189 - 596	17292	Leu-98 to Ala-105, Pro-120 to Gly-127.	AR050: 87, AR054: 77, AR051: 70 H0679: 1		
	972489	9634	182 - 589	19386	Leu-98 to Ala-105, Pro-120 to Gly-127.			
HNHHPF67	859817	7541	191 - 475	17293		S0216: 1 and L0748: 1.		
HNHHPD68	974350	7542	13 - 252	17294	Thr-1 to His-12.	S0216: 1		

HNHOX01	915303	7543	3 - 176	17295	Glu-12 to Ser-18, Arg-24 to Pro-35, Pro-43 to Arg-49.	S0216: 1		
HNHOV24	974344	7544	138 - 278	17296	Lys-21 to Pro-27, Arg-41 to Thr-47.	L0532: 1 and S0216: 1.		
HNHOQ36	859824	7545	108 - 473	17297	Ala-47 to Gly-52, Pro-87 to Ser-98.	L0493: 2 and S0216: 1.		
HNHOP92	790911	7546	2 - 256	17298	Gly-1 to Ser-7, Glu-9 to Asp-18.	S0216: 1 and L0589: 1.		
HNHOP88	974327	7547	3 - 215	17299	Gln-43 to His-51.	S0216: 1		
HNHOP32	974330	7548	293 - 445	17300		S0216: 1		
HNHOI63	838790	7549	103 - 336	17301	Ser-61 to Pro-72.	L0521: 1 and S0216: 1.		
HNHOI07	952285	7550	167 - 358	17302	Asn-1 to Asn-10, Glu-12 to Val-20, Trp-29 to Gly-39, Ser-53 to Thr-60.	S0216: 1 and L0592: 1.		
HNHOF94	948720	7551	2 - 508	17303	Pro-94 to Ser-102.	AR051: 25, AR050: 24, AR054: 20, AR089: 17, AR061: 9 S0216: 1		
HNHNT20	773683	7552	133 - 279	17304		S0216: 1 and L0599: 1.	6p24	134570
HNHNQ08	958377	7553	148 - 429	17305		S0216: 1 and L0748: 1.		
HNHNP81	928378	7554	143 - 514	17306	Ile-1 to Ser-16.	AR051: 23, AR054: 11, AR050: 9, AR061: 8, AR089: 5 S0216: 1		
HNHNP66	918684	7555	3 - 326	17307		S0216: 1		
HNHNO01	915358	7556	200 - 367	17308		S0216: 1 and L0749: 1.		
HNHNM39	950971	7557	249 - 88	17309	Val-2 to Thr-12.	S0216: 1 and L0750: 1.		
HNHNK02	918715	7558	225 - 512	17310	Leu-33 to Ser-40.	L0370: 1 and S0216: 1.		
HNHNJ24	859836	7559	146 - 403	17311		L0775: 1, S0216: 1, L0438: 1 and L0752: 1.		
HNHNI09	800482	7560	223 - 483	17312	Ser-28 to Arg-33.	S0216: 1		
HNHNH51	974343	7561	1 - 255	17313		S0216: 1		
HNHND85	870121	7562	71 - 529	17314	Pro-21 to Ser-26, His-29 to Arg-35,	L0753: 2 and S0216: 1.		

HNHND81	974334	7563	2 - 229	17315	Pro-41 to Leu-50, Thr-87 to Arg-99.	S0216: 1	
HNHND07	952273	7564	186 - 320	17316		S0216: 1 and L0748: 1.	
HNHNB92	790945	7565	34 - 342	17317	Pro-47 to Gly-55.	S0216: 1 and L0777: 1.	
HNHNB85	783887	7566	149 - 322	17318		S0216: 1 and L0745: 1.	
HNHNB02	918709	7567	124 - 234	17319		S0216: 1 and L0748: 1.	
HNHNMZ49	859842	7568	220 - 426	17320		S0216: 1 and L0589: 1.	
HNHMY52	975207	7569	2 - 190	17321	Asn-7 to Ile-25, Ala-29 to His-41.	S0216: 1	
HNHMS26	975206	7570	155 - 286	17322	Ile-33 to Ser-41.	S0216: 1	
HNHMQ86	784986	7571	2 - 151	17323	Pro-1 to Thr-7, Pro-26 to Tyr-31.	S0216: 1 and L0731: 1.	
HNHMQ28	859847	7572	6 - 131	17324		S0216: 1 and L0748: 1.	
HNHMF02	918649	7573	2 - 169	17325	Phe-1 to Phe-7, Lys-23 to Lys-30.	S0216: 1 and L0758: 1.	
HNHLY58	859849	7574	571 - 323	17326		L0365: 1 and S0216: 1.	
HNHLW34	859850	7575	353 - 66	17327	Glu-9 to Lys-19.	S0216: 1 and L0438: 1.	
HNHLW10	963542	7576	16 - 213	17328	Lys-8 to Cys-14.	S0216: 1 and L0361: 1.	
HNHLR36	859851	7577	402 - 587	17329		L0520: 1 and S0216: 1.	
HNHLQ07	952279	7578	387 - 566	17330		L0749: 3 and S0216: 1.	
HNHLG36	855071	7579	335 - 556	17331		L0659: 1, L0663: 1, S0216: 1 and L0601: 1.	
HNHLD70	756668	7580	3 - 221	17332	Ser-10 to Thr-21, Pro-23 to Asn-34, Leu-42 to Thr-51.	S0216: 1 and L0592: 1.	
HNHLC01	915363	7581	277 - 519	17333		L0385: 1 and S0216: 1.	
HNHLB03	923091	7582	2 - 256	17334	Ala-17 to Cys-32, Gln-38 to Lys-47, Ser-58 to Ala-64, Arg-66 to Trp-72.	L0741: 4 and S0216: 1.	
HNHKT86	785104	7583	379 - 44	17335		L0439: 2 and S0216: 1.	
HNHKQ50	723868	7584	84 - 434	17336		L0748: 2, L0766: 1, S0216: 1 and L0779: 1.	

HNHKP03	923276	7585	350 - 679	17337	Pro-20 to His-29.	L0758: 3 and S0216: 1.	
HNHKI61	859925	7586	335 - 505	17338		L0766: 1, S0216: 1 and L0740: 1.	
HNHIS54	730706	7587	189 - 1	17339		S0053: 1 and L0439: 1.	
HNHIR83	781195	7588	36 - 284	17340		S0053: 1 and L0439: 1.	
HNHIC85	784345	7589	137 - 442	17341	Asp-1 to Pro-11, Gly-27 to Cys-34.	S0053: 1, L0748: 1 and L0749: 1.	
HNHHL58	736064	7590	136 - 501	17342	Ile-2 to Arg-8, Phe-21 to Gln-30.	S0053: 1 and L0596: 1.	
HNHGG53	830068	7591	172 - 336	17343		S0053: 1 and L0591: 1.	
HNHFF86	784698	7592	168 - 383	17344		S0053: 1	
HNHFF61	741836	7593	86 - 316	17345		S0053: 1	
HNHFF52	726576	7594	101 - 292	17346	Thr-35 to Pro-40.	S0053: 1	
HNHFF39	705407	7595	149 - 346	17347	Glu-16 to Pro-21, Pro-30 to Pro-36, Arg-47 to Ser-58, Leu-60 to Lys-65.	S0053: 1	
HNHFF38	709278	7596	41 - 184	17348	Ile-38 to Pro-47.	S0053: 1	
HNHFF37	708714	7597	2 - 229	17349		S0053: 1	
HNHFF28	694365	7598	3 - 227	17350	Glu-5 to Pro-14.	S0053: 1 and L0600: 1.	
HNHFF13	657245	7599	138 - 55	17351	Pro-1 to Lys-12, Lys-18 to Leu-24.	S0053: 1	
HNHFF03	924221	7600	101 - 193	17352	Ser-10 to Val-16.	S0053: 1	
HNHHC61	741839	7601	89 - 196	17353	Pro-1 to Gln-8.	L0758: 2, S0053: 1 and L0602: 1.	
HNHGX61	948731	7602	136 - 291	17354	Pro-26 to Lys-34, Pro-47 to Gln-52.	S0053: 1 and L0589: 1.	
HNHGV62	743400	7603	1 - 228	17355	Ser-61 to Pro-70.	S0053: 1	
HNHGU56	859953	7604	117 - 440	17356		L0369: 1 and S0053: 1.	
HNHGT92	496480	7605	12 - 164	17357		S0053: 1	
HNHGT84	781977	7606	110 - 307	17358		S0053: 1	
HNHGT80	775409	7607	45 - 260	17359	Glu-8 to Lys-14, Arg-20 to Gln-25.	S0053: 1	
HNHGT15	660304	7608	144 - 311	17360	Ser-13 to Gln-27.	L0589: 2 and S0053: 1.	
HNHGT09	625615	7609	1 - 243	17361	Thr-2 to Asp-10,	S0053: 1	

HNHGS24	677228	7610	350 - 748	17362	Asp-16 to Ile-21, Ile-25 to Lys-36.	L0749: 3, L0748: 2 and S0053: 1.		
HNHGO45	582523	7611	547 - 879	17363	Cys-51 to Ser-57, Arg-68 to His-77, Asn-93 to His-102.	L0748: 2 and S0053: 1.	11p15.5-p15.4	125852, 126452, 126452, 130650, 141900, 141900, 141900, 141900, 141900, 141900, 142000, 142000, 142200, 142250, 142270, 150000, 176730, 176730, 176730, 190020, 191290, 192500, 192500, 194071, 194071, 204500, 257200, 257200, 600856, 601680, 602631, 602631
HNHGN27	859972	7612	3 - 314	17364	Glu-5 to Ser-14, Pro-22 to Cys-27.	L0758: 2 and S0053: 1.		
HNHGI60	740396	7613	159 - 488	17365		L0745: 4 and S0053: 1.		
HNHGI03	923829	7614	1 - 309	17366	Glu-92 to Lys-103.	S0053: 1		
HNHGH83	781208	7615	2 - 241	17367	Ala-8 to Leu-13, Lys-26 to Val-32.	S0053: 1 and L0592: 1.		
HNHGH22	859983	7616	3 - 251	17368	His-1 to Thr-7, Glu-28 to Asn-37.	S0053: 1 and L0748: 1.		
HNHGG39	561093	7617	117 - 329	17369		AR051: 10, AR050: 10, AR054: 9 S0053: 1 and L0361: 1.		
HNHGF28	686735	7618	18 - 443	17370	Pro-5 to Gly-12.	S0053: 1 and L0740: 1.		
HNHGE91	790212	7619	3 - 242	17371	Glu-18 to Ser-29, Val-31 to Arg-41, Gly-47 to Phe-54.	S0053: 1		
HNHGE81	777955	7620	44 - 295	17372	Lys-29 to Trp-40.	S0053: 1		

HNHGE79	775214	7621	107 - 286	17373	Glu-29 to Asp-35.	S0053: 1	
HNHGE68	753052	7622	1 - 174	17374	Gly-1 to Ser-7, Thr-12 to Lys-19.	S0053: 1	
HNHGE44	683294	7623	1 - 339	17375	Thr-50 to Glu-59.	L0589: 3 and S0053: 1.	
HNHGE31	698046	7624	59 - 169	17376		S0053: 1	
HNHGE24	677234	7625	50 - 154	17377	Pro-16 to Tyr-24.	S0053: 1	
HNHGE12	970722	7626	1 - 396	17378	Gly-1 to Arg-17, Ser-24 to Cys-33, Thr-78 to Arg-88.	S0053: 1	
HNHGD08	959494	7627	1 - 249	17379	Ala-24 to Glu-30.	S0053: 1 and L0603: 1.	
HNHGC92	792740	7628	109 - 285	17380	Asn-22 to Lys-31.	S0053: 1	
HNHGC91	790199	7629	103 - 225	17381	Ser-1 to Gln-9, Pro-15 to Thr-27, His-29 to Tyr-39.	S0053: 1	
HNHGC45	720747	7630	3 - 359	17382	Cys-20 to Ile-27, Thr-45 to Gly-51, Gly-93 to Gly-101.	L0617: 1, L0157: 1 and S0053: 1.	
HNHGC32	699286	7631	1 - 192	17383	Lys-36 to Tyr-41.	S0053: 1	
HNHGC21	670949	7632	58 - 423	17384	Gln-80 to Leu-87.	S0053: 1	
HNHGC20	859991	7633	14 - 247	17385	Arg-5 to Glu-10.	S0053: 1	
HNHGC19	668692	7634	2 - 250	17386		S0053: 1	
HNHGC08	962224	7635	53 - 271	17387	Gln-11 to Asp-19.	S0053: 1	
HNHGC07	953414	7636	44 - 328	17388	Ser-14 to Leu-20, Arg-62 to Gly-68.	S0053: 1	
HNHGB12	970726	7637	377 - 676	17389		L0761: 1, S0053: 1 and L0758: 1.	
HNHGA53	973803	7638	111 - 260	17390		S0053: 1	
HNHFX68	752305	7639	3 - 188	17391	Asp-19 to Glu-28, Ser-38 to Arg-44, Gly-51 to Lys-62.	S0053: 1 and L0592: 1.	
HNHFX08	959475	7640	287 - 448	17392		L0365: 1 and S0053: 1.	
HNHFX10	961275	7641	55 - 222	17393	Gln-20 to Glu-26, Ser-32 to Glu-47.	S0053: 1	
HNHFX08	959484	7642	33 - 218	17394	Ala-9 to Asn-17.	S0053: 1 and L0592: 1.	
HNHFX07	953403	7643	111 - 314	17395	Tyr-17 to His-22.	S0053: 1 and L0779: 1.	

HNHFV49	975415	7644	520 - 768	17396		AR061: 12, AR089: 5 S0053: 1		
HNHFV30	566339	7645	2 - 151	17397	Pro-23 to Trp-32.	AR051: 103, AR050: 100, AR054: 83 S0053: 1		
HNHFU64	937179	7646	264 - 467	17398	Pro-37 to Ala-47.	AR051: 11, AR061: 3, AR089: 2, AR050: 2, AR054: 1 S0053: 1		
HNHFU56	733513	7647	155 - 352	17399	Gln-6 to Ser-15, Pro-17 to Ala-29.	S0053: 1 and L0748: 1.		
HNHFU12	970882	7648	220 - 387	17400		S0053: 1 and L0608: 1.		
HNHFR69	757646	7649	256 - 429	17401		S0053: 1 and L0589: 1.		
HNHFP94	888666	7650	3 - 287	17402	Lys-47 to Pro-54.	AR051: 88, AR050: 84, AR054: 67 S0053: 1		
HNHFP89	786967	7651	129 - 284	17403		S0053: 1 and L0745: 1.		
HNHFP03	924606	7652	1 - 204	17404	Pro-23 to Gly-29.	L0766: 1 and S0053: 1.		
HNHFM74	506283	7653	1 - 270	17405	Gly-12 to Trp-17.	S0053: 1		
HNHFM54	486847	7654	341 - 514	17406	Lys-1 to Asp-9, Lys-15 to Glu-21, Glu-29 to Gly-34.	S0053: 1		
HNHFL96	490923	9635	631 - 329	19387				
	576414	7655	160 - 495	17407	Ser-1 to Lys-10, Gly-16 to Gly-27.	S0053: 1		
HNHFL28	973273	7656	347 - 469	17408	Ser-30 to Gly-38.	S0053: 1		
HNHFH24	903741	7657	28 - 480	17409	His-8 to Gly-18, Ala-39 to Gly-45, Pro-94 to Glu-101.	AR054: 20, AR050: 15, AR061: 7, AR089: 4, AR051: 1 S0053: 1		
HNHFH23	675942	7658	75 - 734	17410	Val-24 to Glu-29, Ser-62 to Ser-68, Ala-75 to Ser-81, Lys-138 to Phe-145.	L0740: 2 and S0053: 1.		
HNHFF79	638126	7659	153 - 281	17411		AR051: 21, AR050: 8 S0053: 1		

HNHFF30	692811	7660	2 - 178	17412	Asn-37 to Cys-43, Gly-50 to Phe-57.	S0053: 1 and L0748: 1.		
HNHFE01	916782	7661	186 - 308	17413		L0758: 2 and S0053: 1.		
HNHFD68	576448	7662	1 - 147	17414	Pro-19 to Gly-32.	AR050: 7, AR054: 6, AR051: 3 S0053: 1		
HNHFB21	842707	7663	9 - 125	17415	Arg-10 to Thr-20.	S0053: 1		
HNHEW83	781217	7664	256 - 498	17416	Lys-2 to Thr-8, Ser-12 to Trp-25, Trp-33 to Cys-39.	L0748: 2 and S0053: 1.		
HNHEW18	666524	7665	54 - 197	17417		S0053: 1, L0438: 1 and L0748: 1.	5	
HNHEU20	668909	7666	72 - 275	17418		S0053: 1 and L0740: 1.		
HNHEQ03	535701	7667	68 - 277	17419	Gly-34 to Ser-41.	S0053: 1		
	535815	9636	68 - 277	19388	Gly-34 to Ser-41.			
	923484	9637	74 - 283	19389	Gly-34 to Ser-41.			
HNHEP86	490390	7668	505 - 278	17420	Gln-1 to Ser-9, Lys-14 to Leu-20, Asp-44 to Gly-57.	S0053: 1		
	785285	9638	71 - 364	19390	Gln-1 to Ala-13, Pro-52 to Gly-57, Leu-84 to Gln-90, Pro-92 to Asp-98.			
HNHEL72	760706	7669	18 - 164	17421		S0053: 1 and L0589: 1.		
HNHEL34	706636	7670	248 - 553	17422	Gln-12 to Met-20, Pro-26 to Gly-31, Phe-39 to Asn-44, Glu-50 to Thr-64.	L0439: 2, S0053: 1 and L0751: 1.		
HNHEL27	506284	7671	114 - 380	17423	Arg-11 to Asn-20.	S0053: 1		
HNHEK69	757649	7672	244 - 402	17424		S0053: 1 and L0439: 1.		
HNHEJ78	800165	7673	20 - 154	17425		S0053: 1		
HNHEJ20	669763	7674	305 - 472	17426	Ser-1 to Trp-15.	S0053: 1 and L0439: 1.		
HNHEI90	888553	7675	22 - 168	17427	Arg-25 to Gln-34.	AR054: 16, AR050: 12, AR051: 8 S0053: 1		
HNHEI37	419752	7676	35 - 205	17428	Pro-46 to Met-51.	L0766: 1 and S0053: 1.		



HNHEH28	973296	7677	22 - 198	17429	Arg-5 to His-11, Thr-13 to Cys-22, Cys-50 to Thr-55.	L0617: 1 and S0053: 1.	
HNHEG71	760464	7678	23 - 190	17430	Leu-7 to Asp-17, Gly-19 to His-27, Pro-33 to Glu-49.	S0053: 1	
HNHEF53	576417	7679	201 - 362	17431	Met-18 to Cys-23.	S0053: 1	
HNHEF08	958854	7680	493 - 230	17432		S0053: 1	
	958883	9639	70 - 339	19391	Ser-46 to Ser-51.		
HNHEE03	924619	7681	351 - 485	17433		S0053: 1 and L0759: 1.	
HNHED88	576529	7682	3 - 206	17434		AR051: 22, AR054: 15, AR050: 11 S0053: 1	
HNHED18	666594	7683	450 - 599	17435	Ser-17 to Asp-23, Ile-32 to Arg-38.	L0749: 2, S0053: 1 and L0748: 1.	
HNHDX25	973295	7684	109 - 330	17436	Thr-50 to Gly-55.	S0053: 1	
HNHDX14	542062	7685	151 - 396	17437		AR054: 14, AR051: 1, AR050: 1 S0053: 1 and L0759: 1.	
	753132	9640	156 - 380	19392			
HNHDX57	734933	7686	1 - 219	17438		S0053: 1 and L0752: 1.	
HNHDX30	692875	7687	302 - 454	17439		S0053: 1 and L0748: 1.	
HNHDX94	883870	7688	257 - 568	17440	Lys-8 to Pro-17, Leu-92 to Ala-99.	L0509: 1 and S0053: 1.	
HNHDX16	422903	7689	246 - 1	17441		L0589: 2 and S0053: 1.	
	661809	9641	91 - 339	19393	Arg-1 to Ser-17, Arg-35 to Ser-40, Gly-64 to Leu-74.		
HNHDX95	559341	7690	67 - 288	17442	Ala-19 to Leu-25.	AR054: 15, AR050: 3 S0053: 1	
	860083	9642	58 - 279	19394	Ala-19 to Leu-25.		
HNHDX93	792467	7691	2 - 349	17443		L0748: 4 and S0053: 1.	
HNHDX16	863116	7692	185 - 3	17444	Thr-30 to Thr-51.	AR051: 28, AR050: 23, AR054: 20 S0053: 1	
HNHDX83	974277	7693	55 - 198	17445		S0053: 1	

HNHDT33	576483	7694	2 - 166	17446			S0053: 1		
HNHDT32	573332	7695	3 - 122	17447	Ser-12 to Lys-24, Lys-29 to Arg-35.		S0053: 1		
HNHDT19	573355	7696	2 - 130	17448	Ser-20 to Pro-26.		S0053: 1		
HNHDT12	576464	7697	3 - 92	17449			S0053: 1		
HNHDT05	932223	7698	2 - 382	17450	Gly-14 to Arg-26, Thr-43 to Arg-58, Pro-63 to Gly-71, Lys-86 to Gly-95.		S0005: 2, S0053: 1 and L0589: 1.		
HNHDM15	660509	7699	215 - 427	17451	Thr-40 to Ser-46, Pro-48 to Pro-58, Ser-65 to Glu-70.		L0747: 2 and S0053: 1.		
HNHDM40	574312	7700	74 - 319	17452			S0053: 1		
HNHDM03	924895	7701	68 - 334	17453	Gln-1 to Leu-12, Ser-16 to His-21.		S0053: 1		
HNHDM07	953883	7702	92 - 379	17454			S0053: 1 and L0361: 1.		
HNHDM52	520297	7703	241 - 71	17455	Pro-49 to Lys-57.		AR050: 2, AR051: 0 S0053: 1		
HNHDC29	904546	7704	24 - 215	17456	Gly-1 to Gly-15, Gly-18 to His-26, Pro-43 to Gly-62.	17q21	S0053: 1	109270, 109270, 109270, 109270, 109270, 113705, 113705, 144200, 148065, 148066, 148066, 148067, 148067, 148069, 148080, 154275, 168610, 171190, 176705, 185800, 200350, 221820, 232200, 249000, 252920, 253250, 600119, 600119, 601363, 601844	
HNHDB69	757760	7705	207 - 416	17457			S0053: 1 and L0756: 1.		
HNHDC284	782897	7706	317 - 105	17458			S0053: 1		
	782898	9643	99 - 290	19395	Val-36 to Gly-43.				

	782939	9644	453 - 265	19396	Thr-5 to Glu-11, Lys-28 to Arg-36.			
HNHCY96	796547	7707	428 - 697	17459	Thr-72 to Pro-77, Pro-82 to Phe-87.	S0053: 1		
HNHCY07	953878	7708	49 - 339	17460	Pro-1 to Val-7, Asp-19 to Tyr-25, Lys-39 to Phe-46.	S0053: 1 and L0780: 1.		
HNHCY06	936061	7709	40 - 150	17461		S0053: 1 and L0759: 1.		
HNHCU08	959944	7710	154 - 294	17462		S0053: 1 and L0599: 1.		
HNHCO94	796745	7711	145 - 267	17463		S0053: 1 and L0600: 1.		
HNHCO69	754189	7712	12 - 362	17464		S0053: 1 and L0777: 1.		
HNHCO39	705641	7713	55 - 294	17465	Arg-18 to Val-23.	S0053: 1 and L0592: 1.		
HNHCM69	757751	7714	196 - 366	17466	Cys-8 to Cys-16.	S0053: 1 and L0748: 1.		
HNHCJ11	964952	7715	89 - 211	17467	Leu-9 to Trp-14.	S0053: 1		
HNHC132	861673	7716	183 - 593	17468	Lys-17 to Thr-23, His-95 to Thr-101.	AR051: 23, AR050: 14, AR061: 10, AR054: 4, AR089: 3 S0053: 1		
	956105	9645	963 - 553	19397	Lys-17 to Thr-23, His-95 to Thr-101.			
HNHCG43	574074	7717	10 - 168	17469	Thr-31 to Gly-37.	S0053: 1		
HNHCG32	574080	7718	90 - 161	17470	Ser-6 to Lys-14.	S0053: 1		
HNHCD33	702679	7719	488 - 655	17471		L0748: 6 and S0053: 1.		
HNHCA27	668255	7720	268 - 465	17472		AR054: 16, AR051: 16, AR050: 3 S0053: 1		
HNHBZ39	860113	7721	114 - 284	17473		AR054: 19, AR050: 18, AR051: 13 S0053: 1		
HNHBX96	796539	7722	61 - 252	17474	Thr-8 to Phe-18, Ser-23 to Asn-34, Ala-37 to Leu-46.	S0053: 1 and L0748: 1.		
HNHBW54	583752	7723	186 - 299	17475		S0053: 1		
	840101	9646	235 - 2	19398	Arg-1 to Ala-9, Phe-18 to Asp-27.			
HNHBU02	920662	7724	74 - 280	17476		S0053: 1 and L0589: 1.		

HNHBO78	574093	7725	2 - 160	17477			S0053: 1		
HNHBK57	490789	7726	296 - 60	17478			S0053: 1		
	513489	9647	2 - 211	19399					
HNHBI48	860125	7727	243 - 533	17479			S0053: 1		
HNHB102	918387	7728	686 - 474	17480			S0053: 1		
	919069	9648	314 - 3	19400		His-34 to Ser-44, Cys-80 to Glu-86, Pro-95 to Gly-101.			
HNHBG42	714044	7729	241 - 351	17481		Arg-21 to Gln-30.	S0053: 1, L0740: 1 and L0777: 1.		
HNHBF78	773747	7730	76 - 300	17482			S0053: 1 and L0589: 1.		
HNHBF47	949027	7731	923 - 501	17483		His-1 to Thr-14.	AR051: 11, AR054: 8, AR050: 7, AR061: 1, AR089: 0 S0053: 1	1	
HNHBE75	766526	7732	82 - 243	17484		Cys-3 to Leu-20.	L0439: 2 and S0053: 1.		
HNHBD73	764293	7733	259 - 134	17485		His-1 to Tyr-7, Ser-17 to Gly-24.	S0053: 1		
HNHBC77	772452	7734	67 - 273	17486			S0053: 1 and L0750: 1.		
HNHAP69	574295	7735	58 - 270	17487		Asn-2 to Arg-9.	S0053: 1		
HNHAP55	574386	7736	2 - 163	17488		Ala-1 to His-11.	S0053: 1		
HNHAP32	574393	7737	99 - 281	17489			S0053: 1		
HNHAP08	959961	7738	132 - 239	17490			S0053: 1		
HNHAM81	574402	7739	1 - 90	17491		Asn-20 to Gln-30.	S0053: 1		
HNHAM80	574404	7740	56 - 160	17492			S0053: 1		
HNHAM33	571334	7741	3 - 95	17493		Thr-1 to Lys-6, Leu-22 to Leu-30.	L0633: 3 and S0053: 1.		
HNHAK41	890594	7742	2 - 166	17494			AR050: 14, AR051: 12, AR054: 2 S0053: 1		
HNHAI41	712605	7743	66 - 233	17495			L0745: 3 and S0053: 1.		
HNHAI07	954088	7744	1 - 168	17496		Arg-1 to Asp-16, Leu-27 to Gly-32.	L0761: 1 and S0053: 1.		
HNHAF61	742116	7745	189 - 686	17497		Pro-5 to Trp-10, Glu-62 to Gly-67, Ala-124 to Asn-129.	AR061: 6, AR089: 3 L0438: 2, L0439: 2, L0752: 2, L0365: 1 and S0053: 1.		

	955094	9649	378 - 1	19401	Thr-56 to Pro-64, Pro-77 to Thr-87, Thr-95 to Glu-100, Asp-112 to Thr-118.			
HNHAE19	527975	7746	429 - 112	17498	Arg-24 to Lys-37, Ser-59 to Pro-70.	L0766: 5, L0788: 1, S0053: 1 and L0747: 1.		
HNHAB36	596822	7747	913 - 653	17499	Arg-19 to Arg-26, Gly-44 to Thr-55, Glu-68 to His-75, Trp-82 to Asp-87.	S0053: 1		
	946565	9650	199 - 2	19402				
	946634	9651	3 - 170	19403	Thr-6 to Cys-17, Gly-23 to Gly-28.			
HNHAB15	973675	7748	420 - 623	17500	Cys-1 to Ser-6.	S0053: 1		
HNGPR43	860142	7749	2 - 304	17501		S0428: 1 and L0600: 1.		
HNGPP74	974046	7750	303 - 557	17502	Gln-1 to Ser-6, Asp-30 to Lys-35.	S0428: 1		
HNGPN54	947104	7751	478 - 113	17503	Pro-16 to Ala-31, Pro-59 to Gly-85, Pro-87 to Pro-96.	AR061: 4, AR089: 1 S0428: 1		
HNGPM65	972821	7752	64 - 270	17504	Arg-1 to Lys-6, Ile-14 to Asn-22.	S0428: 1		
HNGPL75	950134	7753	870 - 559	17505		AR061: 7, AR089: 3 L0766: 1, S0428: 1 and L0592: 1.		
HNGPL05	974049	7754	43 - 270	17506		S0428: 1		
HNGPI87	860162	7755	229 - 426	17507		S0428: 1 and L0589: 1.		
HNGPH83	974045	7756	1 - 147	17508	Tyr-4 to Ile-16.	S0428: 1		
HNGOZ40	969158	7757	13 - 330	17509	Gln-5 to Phe-15, Pro-32 to Ala-39, Pro-49 to Trp-67.	S0428: 1 and L0588: 1.		
HNGOY68	860169	7758	2 - 343	17510	Gly-21 to Leu-30, Pro-51 to Ser-56, Thr-62 to Ala-67.	L0761: 1 and S0428: 1.		
HNGOY32	954991	7759	243 - 590	17511		L0365: 1 and S0428: 1.		
HNGOP63	973415	7760	126 - 557	17512	Pro-22 to Leu-30.	S0428: 1		

HNGOP40	860182	7761	102 - 326	17513	Ser-7 to Ala-14, Arg-25 to His-31, Pro-48 to Gly-62, Gln-68 to Lys-75.	S0428: 1 and L0589: 1.		
HNGOO88	860179	7762	95 - 271	17514		S0428: 1 and L0748: 1.		
HNGON56	974038	7763	520 - 738	17515	Glu-1 to Leu-11.	S0428: 1		
HNGON24	860183	7764	205 - 468	17516		L0369: 1 and S0428: 1.		
HNGOK04	972752	7765	3 - 611	17517	Thr-6 to Ser-13, Leu-52 to Gly-61, Arg-66 to Arg-72, Arg-131 to Pro-136, Arg-145 to Tyr-150, Gly-163 to Ser-168, Ala-186 to Gly-193.	S0428: 1		
HNGOF70	860195	7766	7 - 243	17518		L0766: 2 and S0428: 1.		
HNGNY72	860198	7767	167 - 385	17519	Met-20 to Gly-26.	L0385: 1 and S0428: 1.		
HNGNY16	860617	7768	312 - 590	17520	Pro-35 to Trp-43.	S0428: 1 and L0756: 1.		
HNGNY02	918626	7769	42 - 470	17521	Gln-1 to Gly-9, Gly-40 to Asn-53, Arg-67 to Gln-72, His-100 to Trp-107, Arg-135 to Pro-140.	L0385: 1, L0365: 1 and S0428: 1.		
HNGNX66	974035	7770	391 - 618	17522	Gly-1 to Val-30, Lys-37 to Glu-53.	S0428: 1		
HNGNU85	974037	7771	262 - 594	17523	Arg-27 to Ser-32.	S0428: 1		
HNGNS91	973432	7772	245 - 496	17524	Lys-30 to Asp-37.	S0428: 1		
HNGNN81	974124	7773	96 - 287	17525	Leu-3 to Gly-13, Ala-17 to Pro-26, Glu-44 to Lys-49.	S0428: 1		
HNGNN01	915226	7774	282 - 512	17526		S0428: 1 and L0758: 1.		
HNGNJ46	860212	7775	135 - 470	17527	Leu-12 to Cys-19, Gln-27 to Asn-35.	L0779: 2, L0663: 1, S0428: 1 and L0747: 1.		
HNGNI78	860216	7776	186 - 380	17528	Pro-38 to Trp-44.	S0428: 1 and L0596: 1.		
HNGND75	974968	7777	169 - 450	17529	Pro-3 to Gln-13, Gly-39 to Cys-44, Thr-57 to Trp-66.	S0428: 1		

HNGND01	915294	7778	446 - 580			Thr-81 to Ser-87.			S0428: 1 and L0749: 1.
HNGNA49	974907	7779	371 - 592	17530					S0428: 1
HNGMY91	974056	7780	282 - 575	17531		Val-23 to Gly-29, Ser-48 to Cys-58.			S0428: 1
HNGMW65	950173	7781	295 - 26	17532		Ile-26 to Thr-37.			AR089: 119, AR061: 16 S0428: 1
HNGMT40	930430	7782	2 - 151	17533					L0662: 1, S0428: 1 and L0759: 1.
HNGMM11	966099	7783	40 - 375	17534		Pro-1 to Leu-13, Pro-19 to Pro-27.			S0428: 1 and L0777: 1.
HNGML12	934389	7784	3 - 179	17535					L0761: 1, L0766: 1, S0428: 1 and L0756: 1.
HNGMF02	955660	7785	394 - 642	17536					L0809: 2, L0783: 1, L0791: 1, S0428: 1, L0740: 1 and L0752: 1.
HNGME04	927020	7786	200 - 592	17537					S0428: 1, L0748: 1 and L0749: 1.
HNGMD92	790887	7787	71 - 247	17538		Arg-39 to Asp-56.			S0428: 1 and L0361: 1.
HNGMD48	974358	7788	215 - 400	17539					S0428: 1
HNGMC01	915310	7789	525 - 830	17540		Gln-50 to Ser-61.			L0747: 3 and S0428: 1.
HNGLY12	968919	7790	260 - 439	17541		Thr-8 to Leu-13, Glu-22 to Asn-32.			S0428: 1 and L0758: 1.
HNGLY08	948825	7791	81 - 425	17542		Asn-80 to Ser-86, Phe-98 to Glu-105.			AR051: 17, AR050: 9, AR054: 7 S0428: 1
HNGLS90	787446	7792	253 - 438	17543		Ala-26 to Ala-31, Ser-57 to Arg-62.			S0428: 1, L0748: 1 and L0749: 1.
HNGLR54	972812	7793	314 - 508	17544		Pro-20 to Gln-25, Glu-55 to Ala-60.			S0428: 1
HNGLO21	974067	7794	165 - 479	17545		Pro-22 to Thr-28, Arg-35 to Pro-44.			S0428: 1
HNGLL07	952236	7795	3 - 146	17546					S0428: 1 and L0731: 1.
HNGLK36	974584	7796	402 - 557	17547		Gln-7 to Asp-21, Glu-27 to Gly-37.			S0428: 1
HNGKY10	963459	7797	58 - 156	17548					L0659: 1 and S0428: 1.

HNGKS34	974368	7798	189 - 356	17550	Glu-36 to Pro-42.	S0428: 1	
HNGKQ80	860306	7799	90 - 377	17551	Val-20 to Glu-27.	S0428: 1 and L0589: 1.	
HNGKO32	860307	7800	118 - 414	17552	Pro-4 to Ala-9, Val-18 to Trp-30, His-48 to Leu-59, Phe-91 to Asn-99.	S0428: 1, L0748: 1 and L0749: 1.	
HNGKM74	942758	7801	2 - 988	17553	Phe-148 to Lys-155, Arg-162 to Glu-168, Arg-205 to Thr-213, Pro-235 to Leu-241.	AR051: 17, AR050: 17, AR061: 7, AR089: 3, AR054: 3 L0800: 1 and S0428: 1.	
HNGKL24	974360	7802	319 - 540	17554		S0428: 1	
HNGKJ02	918622	7803	375 - 647	17555	Gly-23 to Pro-28, Pro-31 to Asp-36, Ala-38 to Trp-59, His-71 to Gln-76, Lys-79 to Glu-86.	S0428: 1 and L0731: 1.	
HNGKH07	952210	7804	104 - 247	17556	Pro-2 to Thr-9.	L0655: 1 and S0428: 1.	
HNGKG03	922036	7805	120 - 323	17557		L0518: 1 and S0428: 1.	
HNGKD49	974364	7806	295 - 444	17558		S0428: 1	
HNGKC69	834922	7807	137 - 418	17559	Lys-29 to Thr-40, Arg-58 to Leu-65, Gln-67 to Arg-80, Ser-85 to Asp-92.	AR051: 14, AR054: 4, AR050: 1 S0428: 1	
HNGKC21	974581	7808	102 - 233	17560		S0428: 1	
HNGKC06	934309	7809	3 - 431	17561	Ser-21 to Lys-29, Gln-31 to His-37.	S0428: 1 and L0758: 1.	
HNGKA11	966117	7810	118 - 300	17562		L0787: 1, S0428: 1 and L0592: 1.	
HNGJV82	778921	7811	305 - 439	17563	Gly-14 to Arg-21, Gln-31 to Gln-37.	S0052: 1 and L0592: 1.	
HNGJR05	860357	7812	212 - 460	17564	Ser-16 to Asp-27, Arg-37 to Gly-44.	S0052: 1 and L0589: 1.	
HNGJQ96	796414	7813	37 - 282	17565	Thr-24 to Thr-29, Thr-42 to Lys-47, Ala-52 to Asn-64.	S0052: 1	
HNGJQ36	708121	7814	45 - 242	17566	Pro-46 to Gly-53.	S0052: 1	



HNGJQ08	959511	7815	26 - 103	17567			S0052: 1		
HNGJL47	720363	7816	3 - 404	17568	Arg-31 to Ser-37, Pro-39 to Pro-45.		L0771: 8, L0591: 2, L0788: 1 and S0052: 1.		
HNGJK64	746615	7817	22 - 147	17569	Ser-19 to Leu-26, Leu-30 to Gln-35.		S0052: 1		
HNGJK63	839947	7818	2 - 181	17570			S0052: 1 and L0758: 1.		
HNGJK40	711219	7819	138 - 380	17571	Thr-26 to Gly-31.		S0052: 1		
HNGJI40	711211	7820	2 - 385	17572	Ala-6 to Gly-11, Phe-21 to Leu-28, Cys-45 to Ile-53.		S0052: 1		
HNGJI04	615285	7821	3 - 164	17573	Gly-34 to Phe-41.		S0052: 1		
HNGJG75	942946	7822	90 - 662	17574	His-1 to Phe-14, Gln-18 to Arg-24, Ser-44 to His-49, Phe-121 to Asp-131, Ser-149 to Thr-174.		AR061: 4, AR089: 1 S0052: 1		
	951158	9652	469 - 251	19404					
HNGJG35	422897	7823	393 - 253	17575			S0052: 1		
HNGJE38	495689	7824	630 - 109	17576			S0052: 1 and L0758: 1.		
	860403	9653	95 - 379	19405	Pro-39 to Cys-52.				
HNGJE23	600366	7825	634 - 467	17577	Tyr-17 to Lys-22, Gly-46 to Thr-54.		S0052: 1		
	860413	9654	463 - 296	19406	Lys-6 to Leu-12.				
HNGJE08	973790	7826	392 - 547	17578	Pro-40 to Glu-50.		S0052: 1		
HNGJE01	973797	7827	392 - 529	17579			S0052: 1		
HNGJC68	888447	7828	103 - 348	17580			AR051: 86, AR050: 64, AR054: 54 S0052: 1		
HNGJC29	695660	7829	96 - 425	17581	Trp-1 to Arg-8, Gln-14 to Thr-21, Ser-39 to Gly-51, Arg-65 to Gln-72, Ser-80 to Glu-85, His-90 to Gly-96.		S0052: 1 and L0747: 1.		
HNGJB49	723004	7830	3 - 302	17582	His-7 to Gly-22, His-62 to Asn-71.		L0748: 5, S0052: 1 and L0749: 1.		

HNGJA75	888461	7831	95 - 256	17583	Thr-17 to Leu-26, Gly-47 to Gly-53.	AR051: 25, AR050: 16, AR054: 1 S0052: 1		
HNGIX71	760398	7832	3 - 293	17584	His-30 to Gln-37.	L0748: 2 and S0052: 1.		
HNGIW45	717698	7833	1 - 198	17585	Ser-46 to Lys-56.	S0052: 1		
HNGIS92	792748	7834	1 - 540	17586		S0052: 1 and L0439: 1.		
HNGIS70	757216	7835	373 - 621	17587	Ser-66 to Ser-73.	S0052: 1 and L0740: 1.		
HNGIS02	920221	7836	327 - 542	17588	Ser-15 to Lys-24.	L0769: 1 and S0052: 1.		
HNGIR10	964715	7837	317 - 496	17589	Pro-7 to Phe-12.	L0769: 3 and S0052: 1.		
HNGIQ78	772866	7838	112 - 324	17590	Asp-6 to Ser-20, Arg-46 to Phe-53, Pro-60 to Leu-67.	S0052: 1		
	773431	9655	586 - 365	19407				
HNGIQ71	495771	7839	487 - 176	17591	Ala-1 to Cys-7, Gln-21 to Gly-40, Pro-49 to Gly-54, Ser-72 to Trp-91.	S0052: 1		
	860506	9656	308 - 658	19408				
HNGIP47	720374	7840	247 - 450	17592	His-15 to Met-25.	S0052: 1 and L0589: 1.		
HNGIP27	860515	7841	210 - 476	17593		S0052: 1		
HNGIO64	487439	7842	231 - 401	17594		S0052: 1		
	927636	9657	396 - 280	19409	Ala-15 to Arg-22.			
HNGIO52	727196	7843	207 - 422	17595		S0052: 1 and L0756: 1.		
HNGIL94	793171	7844	123 - 326	17596	Pro-15 to Arg-22.	S0052: 1		
HNGIL84	781970	7845	50 - 340	17597		L0747: 2 and S0052: 1.		
HNGIL82	812699	7846	174 - 368	17598	Ile-3 to Trp-14, Glu-54 to Asn-65.	S0052: 1		
HNGIL51	725003	7847	1 - 249	17599	Gly-1 to Glu-8, Thr-37 to Arg-47, Pro-57 to Arg-62, Pro-78 to Thr-83.	S0052: 1	2p11.2	178640, 216900
HNGIL22	860525	7848	76 - 306	17600	Ala-1 to Thr-6.	L0527: 1 and S0052: 1.		
HNGIL51	868068	7849	178 - 348	17601	Thr-9 to Cys-14, Lys-38 to Arg-45.	L0752: 2 and S0052: 1.		
HNGHY44	973977	7850	245 - 424	17602	Asp-25 to Gly-32.	S0052: 1		

HNGHO94	793271	7851	1 - 219	17603	Asn-1 to His-10, Pro-53 to Ala-72.	S0052: 1		
HNGHM61	576221	7852	39 - 236	17604	Pro-4 to His-18, Pro-28 to Arg-39, Gln-53 to Gly-58.	S0052: 1		
HNGHL46	860541	7853	291 - 476	17605		S0052: 1		
HNGHJ01	916757	7854	1 - 204	17606	Gln-1 to Asp-9, Asp-19 to Gly-25, His-58 to Ala-65.	S0052: 1 and L0758: 1.		
HNGHG39	860554	7855	3 - 248	17607	His-1 to Met-8.	S0052: 1 and L0366: 1.		
HNGHD68	576315	7856	246 - 1	17608		S0052: 1		
HNGGV02	920377	7857	212 - 430	17609		S0052: 1		
HNGGT08	959649	7858	44 - 193	17610		S0052: 1 and L0748: 1.		
HNGGP91	576251	7859	1 - 360	17611		L0743: 2 and S0052: 1.		
HNGGP55	578450	7860	91 - 186	17612		S0052: 1		
HNGGL74	765644	7861	828 - 487	17613	Tyr-21 to Tyr-26, His-36 to Lys-44, Leu-70 to Gly-76.	AR050: 136, AR054: 117, AR051: 105 S0052: 1		
HNGGF86	860568	7862	247 - 426	17614	Thr-1 to His-11.	S0052: 1		
HNGGB58	738213	7863	16 - 156	17615		S0052: 1 and L0754: 1.		
HNGGB28	703315	7864	2 - 199	17616	Ala-1 to Ala-10, Pro-12 to Ser-19, Asp-31 to Gly-44, Pro-49 to Arg-66.	S0052: 1		
HNGFX89	506492	7865	202 - 468	17617	Asn-13 to Ala-19.	AR050: 19, AR051: 15, AR054: 8 S0052: 1		
	578679	9658	34 - 144	19410				
	578680	9659	529 - 413	19411				
HNGFX75	608695	7866	394 - 630	17618		S0052: 1		
HNGFU33	702584	7867	472 - 663	17619	Gly-2 to Phe-8, Pro-17 to Asn-22, Met-56 to Gly-62.	L0747: 3, L0803: 2, L0659: 2, L0666: 2, L0662: 1, L0546: 1, S0052: 1, L0750: 1, L0779: 1, L0752: 1 and L0758: 1.		
HNGFT02	920480	7868	212 - 319	17620		S0052: 1 and L0747: 1.		

HNGFR06	935821	7869	2 - 421	17621	Leu-41 to Glu-52.	S0052: 1, L0439: 1 and L0754: 1.		
HNGFP92	842276	7870	439 - 621	17622	Gly-1 to Asp-7, Ala-17 to Gly-22.	S0052: 1		
	889744	9660	140 - 442	19412	Thr-3 to Ala-33, Ala-44 to Cys-49, Phe-64 to Trp-71, Ala-84 to Arg-89, Ala-94 to Ser-101.			
HNGFN70	872950	7871	3 - 191	17623	Ser-10 to Asn-17, Gly-32 to Lys-44.	AR051: 41, AR050: 40, AR054: 33 S0052: 1		
HNGFM17	664280	7872	345 - 635	17624	Leu-11 to Glu-19, Gly-27 to Ala-36, Ser-45 to Ser-59.	S0052: 1 and L0748: 1.		
HNGFK34	703419	7873	1 - 309	17625	Thr-2 to Trp-9, Val-33 to Leu-38, Gly-43 to Cys-51.	L0518: 1 and S0052: 1.		
HNGFI11	967304	7874	1 - 285	17626	Glu-63 to Ser-68, Asp-75 to Pro-82.	L0517: 1 and S0052: 1.		
HNGFH90	789066	7875	45 - 317	17627	Gln-11 to Gln-16, Ser-24 to Arg-29, Ser-39 to Gly-45.	S0052: 1 and L0594: 1.		
HNGFH58	738240	7876	1 - 201	17628		L0748: 2 and S0052: 1.		
HNGFH30	823363	7877	2582 - 2280	17629	Lys-30 to Met-35, Pro-49 to Gly-56, His-72 to Ser-77, Ala-82 to Gly-92.	AR050: 17, AR054: 1 S0052: 1		
	824134	9661	227 - 649	19413	Lys-30 to Met-35, Pro-49 to Gly-56.			
HNGFG10	854048	9662	2 - 79	19414	Lys-1 to Leu-12.			
	968059	7878	800 - 1042	17630	Ser-64 to His-69.	L0747: 3, L0589: 2 and S0052: 1.		
HNGFF50	941480	7879	1 - 342	17631	Ala-3 to Thr-11, Ala-33 to His-43, Gly-67 to Leu-74.	S0052: 1		

HNGFE75	486855	7880	290 - 502	17632	Pro-96 to His-102, Gln-104 to Thr-114.	S0052: 1		
	490615	9663	493 - 89	19415	Glu-39 to Gly-46, Ser-56 to Arg-64.			
	871493	7881	108 - 470	17633	Leu-10 to Gln-17.			
HNGFE58					Pro-17 to Trp-22, Ile-26 to Gly-31, Ala-35 to Gly-46, Asp-49 to Glu-88, Met-105 to Pro-113.	S0052: 1 and L0596: 1.		
	927579	7882	101 - 250	17634	Trp-17 to Met-23, Gly-25 to Asn-40, Phe-43 to Arg-48.			
	666626	7883	102 - 395	17635	Ser-6 to Ser-13, Leu-20 to Pro-27.			
HNGFA18	666626	7883	102 - 395	17635	Ser-6 to Ser-13, Leu-20 to Pro-27.	S0052: 1, L0779: 1 and L0731: 1.		
HNGEY55	888324	7884	1 - 375	17636	Gly-1 to Trp-9, Gly-45 to Asp-57, Gly-64 to Trp-81.	AR050: 23, AR051: 19, AR054: 13 S0052: 1		
	868073	7885	248 - 460	17637	Glu-1 to Asp-9.	L2245: 1 and S0052: 1.		
	860615	7886	129 - 452	17638	Ala-1 to Ser-6, Pro-24 to His-36, Val-80 to Asn-88, Gly-94 to Gln-100.	L0773: 1 and S0052: 1.		
HNGEW38	964163	9664	569 - 159	19416	Pro-19 to Gln-25.	S0052: 1 and L0742: 1.	22q12.1	123620, 188826, 600850, 601669
	573234	7887	298 - 690	17639	Trp-7 to Pro-12, Leu-38 to Lys-44, Thr-69 to Arg-76, Leu-93 to Ser-99, His-115 to Ser-124.			
	669811	7888	320 - 535	17640	Glu-6 to Lys-22, Ser-42 to Ser-55, Ser-58 to Ala-65.			
HNGEU20	669811	7888	320 - 535	17640	Glu-6 to Lys-22, Ser-42 to Ser-55, Ser-58 to Ala-65.	L0754: 2 and S0052: 1.		
HNGET91	789373	7889	3 - 377	17641	His-1 to Ile-16.	L0754: 2 and S0052: 1.		
HNGER86	578910	7890	3 - 263	17642	Gln-1 to Ala-7, Trp-15 to Thr-21.	S0052: 1		
HNGER73	578909	7891	10 - 324	17643	Gly-11 to Pro-17,	S0052: 1		

							Trp-31 to Trp-38, Ser-45 to Met-51.				
HNGER62	578922	7892	107 - 307	17644			Gln-6 to Arg-18.		S0052: 1		
HNGER61	578907	7893	116 - 325	17645			Ser-16 to Thr-24, Ala-37 to Ser-49.		S0052: 1		
HNGER50	576479	7894	60 - 230	17646			Lys-8 to Cys-14.		S0052: 1		
HNGER38	578908	7895	1 - 138	17647			Gly-1 to Cys-7, Asp-23 to Gly-31, Cys-34 to Asn-40.		S0052: 1		
HNGER26	860623	7896	127 - 384	17648					S0052: 1		
HNGEO79	951489	7897	200 - 640	17649			Gln-41 to Asp-48, Ser-67 to Leu-72, Thr-79 to Ser-84, Ile-96 to Ser-103, Arg-120 to Ser-127.		AR061: 46, AR089: 19, AR051: 12, AR054: 10, AR050: 9 S0052: 1 and L0758: 1.		
HNGEN04	586457	7898	30 - 302	17650			Arg-1 to Gly-13, His-19 to Gly-24.		AR050: 63, AR051: 54, AR054: 40 S0052: 1		
HNGEK57	734923	7899	92 - 307	17651					S0052: 1 and L0592: 1.		
HNGEK16	578914	7900	2 - 172	17652			Ala-1 to Asp-9.		S0052: 1		
HNGEI44	800199	7901	13 - 345	17653			Pro-10 to Phe-15, Ala-59 to Pro-66, Pro-69 to Gln-85.		S0052: 1		
HNGEI11	967314	7902	121 - 276	17654					S0052: 1 and L0589: 1.		
HNGEG07	953658	7903	274 - 411	17655			Lys-26 to His-46.		S0052: 1 and L0589: 1.		
HNGEF81	570236	7904	2 - 220	17656			Glu-3 to Asp-13, Pro-18 to His-39.		S0052: 1		
	590251	9665	483 - 731	19417			Gly-10 to Asn-20, Glu-61 to Gly-79.				
	860649	9666	246 - 560	19418			Asp-10 to Gly-16.				
HNGEE10	968043	7905	72 - 251	17657							
HNGED92	654085	7906	257 - 3	17658			Ser-1 to Ile-7, Pro-32 to His-38, Pro-60 to Ala-69, Arg-71 to Gly-79.		S0052: 1 and L0589: 1. S0052: 1		
	846048	9667	56 - 265	19419							

HNGED46	838885	7907	259 - 441	17659	Glu-29 to Leu-34, Gly-43 to Lys-50.	S0052: 1	
HNGEB84	783132	7908	83 - 235	17660	Arg-31 to Ala-37.	S0052: 1 and L0748: 1.	
HNGEA17	561293	7909	1 - 261	17661	Leu-8 to Arg-15, Gly-72 to Leu-81.	S0052: 1	
HNGDZ93	888677	7910	1 - 132	17662	Ile-20 to Asn-25, Pro-33 to Ser-43.	AR051: 21, AR054: 7, AR050: 1 S0052: 1	
HNGDW53	973311	7911	153 - 380	17663		S0052: 1	
HNGDW19	502499	7912	233 - 448	17664		S0052: 1	
	511193	9668	602 - 261	19420	His-10 to Lys-19, Arg-21 to Cys-29, Pro-31 to Ser-41, Gln-47 to Trp-54, Ala-57 to Gly-69, Gln-84 to Phe-102.		
HNGDV38	572912	7913	50 - 136	17665		S0052: 1	
HNGDV26	572906	7914	70 - 249	17666	Pro-24 to Arg-38.	S0052: 1	
HNGDV15	572902	7915	3 - 275	17667	Ser-1 to Asn-16, Asn-27 to Gln-41.	S0052: 1	
HNGDV02	920504	7916	3 - 167	17668	Ser-24 to Ser-35.	S0052: 1	
HNGDV01	916989	7917	73 - 204	17669	Gln-16 to His-27, Ala-32 to Cys-37.	S0052: 1	
HNGDS21	396889	7918	538 - 404	17670	Ile-40 to Arg-45.	S0052: 1	
	670757	9669	151 - 291	19421	Pro-32 to Trp-37.		
HNGDR65	572896	7919	116 - 223	17671	Asp-1 to Ser-7.	S0052: 1	
HNGDQ68	753164	7920	4 - 318	17672	Gly-1 to Gly-8, Thr-16 to Gly-25, Gly-65 to Glu-80.	S0052: 1 and L0592: 1.	
HNGDQ56	733550	7921	7 - 270	17673	Phe-64 to Arg-71, Gln-77 to His-83.	S0052: 1 and L0361: 1.	
HNGDO68	753580	7922	3 - 107	17674		S0052: 1 and L0748: 1.	
HNGDO54	521883	7923	225 - 368	17675	Lys-9 to Leu-14.	S0052: 1	
HNGDO53	574450	7924	68 - 217	17676		S0052: 1	
HNGDO52	868772	7925	1 - 192	17677	Gly-9 to Gly-15, Pro-33 to Pro-40.	S0052: 1	

HNGDO40	574449	7926	166 - 2	17678	Pro-1 to Lys-11.	S0052: 1	
HNGDO30	574446	7927	45 - 131	17679	Glu-24 to Ser-29.	S0052: 1	
HNGDO29	526804	7928	186 - 347	17680	Gln-11 to Gln-17.	S0052: 1	
HNGDO18	526514	7929	122 - 238	17681	Arg-15 to Glu-24.	S0052: 1	
HNGDO06	936059	7930	136 - 261	17682	Ser-15 to Phe-22, Ala-35 to Arg-41.	S0052: 1	
HNGDO05	932400	7931	51 - 125	17683		S0052: 1	
HNGDO04	523469	7932	219 - 320	17684	Leu-13 to Arg-19.	S0052: 1	
HNGDM11	967512	7933	391 - 534	17685		L0766: 1, S0052: 1 and L0754: 1.	
HNGDL51	860671	7934	1 - 258	17686	Asn-6 to Ser-15, Pro-29 to Ser-34, Ser-49 to Arg-54.	AR054: 26, AR050: 23, AR051: 22 S0052: 1	
HNGDF94	796744	7935	24 - 128	17687		S0052: 1	
HNGDF70	506694	7936	87 - 206	17688		S0052: 1	
HNGDF58	506693	7937	19 - 315	17689	Glu-36 to Ala-46, Phe-50 to Cys-56.	L0748: 2 and S0052: 1.	
HNGDF38	574349	7938	112 - 240	17690	Asp-1 to Asn-8.	S0052: 1	
HNGDF10	968240	7939	135 - 350	17691		S0052: 1	
HNGDE79	781680	7940	269 - 403	17692	Glu-35 to Leu-41.	S0052: 1 and L0748: 1.	
HNGDE74	765812	7941	1 - 120	17693		L0748: 2 and S0052: 1.	
HNGDD27	860680	7942	91 - 252	17694	Met-26 to Ser-32.	S0052: 1	
HNGDD03	924933	7943	59 - 202	17695	Arg-6 to Asn-12.	S0052: 1	
HNGDD02	920675	7944	70 - 186	17696		S0052: 1	
HNGDB78	772804	7945	1 - 195	17697		S0052: 1	
HNGDB61	742043	7946	177 - 452	17698		S0052: 1 and L0589: 1.	
HNGDB59	688019	7947	33 - 143	17699	Asn-1 to Lys-12.	S0052: 1	
HNGDB54	574359	7948	12 - 191	17700		S0052: 1	
HNGDB40	574346	7949	3 - 110	17701	Lys-6 to Arg-12.	S0052: 1	
HNGDB16	574352	7950	2 - 100	17702	Lys-20 to Gly-25, Arg-27 to Thr-33.	S0052: 1	
HNGDB04	576460	7951	2 - 115	17703	Thr-4 to Ala-11.	S0052: 1	
HNGDA08	959964	7952	180 - 455	17704	Ser-1 to Gly-6, Arg-11 to Trp-20.	L0770: 1 and S0052: 1.	
HNGCZ54	730895	7953	62 - 292	17705		S0052: 1 and L0746: 1.	



HNGCY60	827144	7954	1 - 447	17706	Lys-1 to Ser-8.	S0052: 1 and L0747: 1.		
HNGCY10	968247	7955	121 - 246	17707	Ala-30 to Ser-40.	L0766: 1 and S0052: 1.		
HNGCQ38	544484	7956	302 - 87	17708	Arg-33 to Phe-38.	S0052: 1		
	860692	9670	35 - 226	19422				
HNGCP14	417271	7957	1 - 258	17709		S0052: 1, L0748: 1 and L0731: 1.		
HNGCO71	663340	7958	271 - 2	17710	Lys-6 to Gly-12, Pro-40 to Asn-47.	S0052: 1		
	889333	9671	746 - 510	19423				
	889334	9672	3 - 185	19424				
	889335	9673	2 - 145	19425				
HNGCO15	494338	7959	200 - 3	17711	Arg-11 to Leu-17.	S0052: 1		
	519229	9674	1 - 132	19426	Gly-10 to Phe-19.			
	825388	9675	1 - 255	19427				
HNGCG39	704547	7960	219 - 410	17712	Ser-1 to Cys-10, Gly-21 to Asp-26.	L0743: 2 and S0052: 1.		
HNGCE81	961700	7961	803 - 1195	17713	Ser-1 to Cys-10, Gly-21 to Asp-26.	S0052: 1		
	971688	9676	576 - 184	19428	Arg-1 to Trp-31, Pro-33 to Arg-50, Leu-52 to Arg-60.			
	971689	9677	143 - 331	19429	Thr-27 to Ala-34, Arg-36 to Arg-44, Pro-89 to Ser-100.			
	971690	9678	261 - 563	19430	Gly-8 to Glu-18.			
HNGCE40	860699	7962	536 - 745	17714		AR051: 24, AR054: 9, AR050: 3 S0052: 1		
HNGCC02	638114	7963	192 - 419	17715	Pro-39 to Ser-47.	S0052: 1		
	917319	9679	186 - 413	19431				
HNGBW07	953894	7964	32 - 277	17716	Ala-30 to Lys-35.	S0052: 1 and L0749: 1.		
HNGBS77	494334	7965	263 - 96	17717	Glu-43 to Tyr-51.	S0052: 1		
	860721	9680	769 - 975	19432	Asn-1 to Lys-6.			
HNGBP42	574401	7966	76 - 291	17718	Thr-20 to Gly-27.	AR051: 11, AR054: 8, AR050: 1		

HNGBO01	921413	7967	1 - 144	17719			S0052: 1		
HNGBN12	920949	7968	88 - 333	17720	Ser-70 to Trp-77.		S0052: 1 and L0759: 1. L0800: 1, S0052: 1 and L0758: 1.		
HNGBL40	880778	7969	72 - 356	17721			S0052: 1 and L0361: 1.		
HNGBF25	678767	7970	331 - 507	17722	Pro-15 to Leu-22.		S0052: 1 and L0745: 1.		
HNGAZ70	757413	7971	138 - 359	17723	Pro-69 to Ser-74.		S0052: 1 and L0754: 1.		
HNGAZ56	733631	7972	186 - 416	17724	Asn-8 to Lys-14, Arg-42 to Arg-48, Ile-50 to Gly-55.		L0747: 2 and S0052: 1.		
HNGAZ08	959977	7973	242 - 436	17725			L0766: 1, S0052: 1 and L0779: 1.		
HNGAX93	792525	7974	198 - 1	17726			S0052: 1 and L0749: 1.		
HNGAW50	723632	7975	3 - 107	17727			L0748: 2, S0052: 1 and L0749: 1.		
HNGAV20	669901	7976	1 - 186	17728			L0748: 4, L0659: 1 and S0052: 1.		
HNGAR02	920736	7977	105 - 332	17729	Arg-25 to Glu-41.		L0375: 1, L0365: 1 and S0052: 1.		
HNGAQ75	766512	7978	3 - 149	17730	Arg-6 to Leu-13.		S0052: 1		
HNGAQ73	574649	7979	1 - 150	17731			S0052: 1		
HNGAQ49	574652	7980	25 - 171	17732			S0052: 1		
HNGAQ38	574658	7981	3 - 125	17733	Pro-10 to Thr-19.		S0052: 1		
HNGAQ37	575492	7982	3 - 149	17734	Val-22 to Ser-34.		S0052: 1		
HNGAQ14	574660	7983	27 - 95	17735	Pro-1 to Phe-8.		S0052: 1		
HNGAQ02	920756	7984	5 - 115	17736	Gln-10 to Gln-18, His-20 to Asn-27.		S0052: 1		
HNGAQ01	921434	7985	3 - 161	17737	Pro-16 to Gly-25.		S0052: 1		
HNGAP69	513808	7986	406 - 666	17738			S0052: 1		
	537606	9681	417 - 40	19433					
HNGAM31	426200	7987	287 - 39	17739	Thr-46 to Ser-54.		S0052: 1		
	860765	9682	117 - 374	19434					
HNGAJ78	773425	7988	281 - 637	17740	Pro-7 to Ser-14.		AR054: 44, AR050: 36, AR051: 5 S0052: 1		

HNGAD20	888315	9683	1 - 219	19435			AR051: 23, AR054: 12, AR050: 3 S0052: 1		
	890591	7989	3 - 158	17741					
HNFJI67	751605	7990	75 - 260	17742	Glu-48 to Ala-54.		H0271: 1 and L0599: 1.		
HNFJB08	959428	7991	326 - 520	17743	Asn-1 to Leu-14, Lys-25 to Arg-30.		H0271: 1, L0748: 1 and L0758: 1.		
HNFYI76	767681	7992	143 - 316	17744			H0416: 1 and L0749: 1.		
HNFVW53	467056	7993	172 - 363	17745	Ala-24 to Lys-29, Gly-37 to Arg-52.		H0416: 1 and L0745: 1.		
HNFVW14	658129	7994	2 - 265	17746			H0416: 1 and L0591: 1.	17	
HNFVW17	429602	7995	314 - 550	17747	Gln-1 to Gly-11, Gln-22 to Ser-29.		H0416: 1		
	460818	9684	248 - 24	19436	Thr-1 to Thr-12.				
HNFVW07	953330	7996	257 - 526	17748	Asp-1 to Thr-10.		H0416: 1 and L0748: 1.		
HNFVW11	966347	7997	162 - 434	17749	Pro-8 to Gly-13.		H0416: 1		
HNFVW59	739358	7998	283 - 450	17750	His-8 to Ser-16, Asp-50 to Gly-55.		H0416: 1 and L0748: 1.		
HNFVW59	951005	7999	948 - 769	17751			H0271: 1		
HNFVW58	735299	8000	320 - 673	17752	Glu-49 to Glu-58, His-70 to Gly-75.		H0271: 1 and L0748: 1.		
HNFVW96	716913	8001	3 - 269	17753	Pro-9 to Thr-20, Gln-55 to Trp-65, Glu-70 to Ala-85.		L0766: 2, L0439: 2, H0271: 1 and L0756: 1.		
HNFVW61	741901	8002	123 - 293	17754			H0271: 1		
HNFVW56	733297	8003	230 - 57	17755			H0271: 1		
	868091	9685	439 - 600	19437					
HNFVW09	961165	8004	188 - 463	17756	Lys-1 to Glu-8, Gln-20 to Ala-27.		H0271: 1 and L0592: 1.		
HNFVW84	783199	8005	1 - 93	17757	Pro-26 to Arg-31.		L0745: 2, L0746: 2, H0271: 1 and L0748: 1.		
HNFVW65	574598	8006	3 - 95	17758	His-1 to Cys-12.		H0271: 1		
HNFVW42	526844	8007	2 - 118	17759			H0271: 1		
HNFVW17	574597	8008	80 - 184	17760	Asn-1 to Glu-13.		H0271: 1		
HNFVW36	574601	8009	22 - 150	17761			H0271: 1		

HNFGH32	574605	8010	127 - 240	17762			H0271: 1		
HNFGG80	574602	8011	1 - 72	17763	Thr-8 to Arg-14.		H0271: 1		
HNFGG18	574608	8012	37 - 144	17764			H0271: 1 and L0756: 1.		
HNFGG06	936086	8013	2 - 295	17765			H0271: 1		
HNFGF88	522077	8014	126 - 257	17766			H0271: 1		
HNFGF66	860896	8015	88 - 372	17767			H0271: 1 and L0758: 1.		
HNFGF52	522293	8016	61 - 360	17768			H0271: 1		
HNFGF37	574609	8017	41 - 223	17769	Leu-50 to Val-55.		H0271: 1	22q	
HNFGEB80	571306	8018	75 - 245	17770	Lys-1 to Asp-6.		H0271: 1		
HNFGEB41	504165	8019	2 - 142	17771	Gly-30 to Lys-36.		H0271: 1		
HNFGGB81	778250	8020	297 - 497	17772	Cys-37 to Asp-42.		L0599: 2 and H0271: 1.		
HNFGA92	790617	8021	222 - 419	17773			H0271: 1 and L0750: 1.		
HNFGA85	521880	8022	51 - 365	17774			H0271: 1		
HNFGA57	571305	8023	3 - 113	17775			H0271: 1		
HNFFU64	578096	8024	172 - 282	17776			H0271: 1, UNKWN: 1 and L0600: 1.		
HNFFR38	455273	8025	704 - 339	17777			H0271: 1		
	860903	9686	15 - 284	19438	Gln-30 to Lys-35, Leu-54 to His-60.				
HNFFQ29	860905	8026	114 - 404	17778	Ser-76 to Pro-86.		H0271: 1 and L0774: 1.		
HNFFO20	836239	8027	195 - 350	17779	Phe-14 to Leu-21, His-33 to Glu-40.		H0271: 1 and L0746: 1.		
HNFFL57	786899	8028	208 - 423	17780	Leu-15 to Gly-20.		H0271: 1 and L0754: 1.		
HNFFO5	932432	8029	37 - 132	17781			L0471: 1 and H0271: 1.		
HNFFC75	767453	8030	3 - 158	17782			H0271: 1		
HNFEY24	677114	8031	65 - 286	17783			H0271: 1		
HNFE06	936099	8032	198 - 332	17784			H0271: 1 and L0748: 1.		
HNFEQ28	685514	8033	157 - 396	17785			H0271: 1 and L0747: 1.		
HNFE184	783211	8034	249 - 392	17786			H0271: 1 and L0748: 1.		
HNFCV02	861004	8035	73 - 279	17787	Pro-36 to Gly-45, Ser-64 to Thr-69.		AR051: 40, AR054: 38, AR050: 29 H0271: 1		
HNFCO90	529966	8036	31 - 168	17788	Ile-14 to Ser-30.		H0271: 1		
HNFCO85	529967	8037	2 - 151	17789			H0271: 1		
HNFCO52	518637	8038	1 - 216	17790			H0271: 1		

HNFCO41	529970	8039	2 - 145	17791			H0271: 1		
HNFCO37	507312	8040	634 - 804	17792			L0748: 4, L0749: 2 and H0271: 1.		
HNFCO32	529971	8041	3 - 206	17793			H0271: 1		
HNFCO22	529973	8042	35 - 160	17794			H0271: 1		
HNFCO25	556464	8043	116 - 232	17795			AR051: 2, AR054: 1, AR050: 1 H0271: 1 and L0457: 1.		
HNFBY08	960222	8044	1 - 177	17796		Gln-16 to Lys-22.	L0748: 2 and H0271: 1.		
HNFBT45	574972	8045	154 - 375	17797		Ser-1 to Trp-6, Asn-8 to Trp-13, Ala-21 to Gly-38, Cys-46 to Trp-52.	AR051: 24, AR054: 9, AR050: 2 H0271: 1		
HNFBQ02	921029	8046	29 - 271	17798		Leu-15 to Thr-21, Lys-27 to Leu-36, Asp-39 to Thr-47.	H0271: 1 and L0745: 1.		
HNFAF78	601639	8047	567 - 313	17799			H0271: 1		
	679579	9687	202 - 2	19439		Arg-25 to Ala-31.			
	892100	9688	276 - 845	19440		Arg-1 to Gly-8, Pro-10 to Gly-15, His-41 to Gly-48, Pro-77 to Gly-91, Leu-151 to Val-158.			
HNEDU66	861030	8048	116 - 337	17800			H0179: 1 and L0776: 1.		
HNEDR54	730953	8049	229 - 405	17801		Leu-20 to Cys-26, His-52 to Ser-58.	H0179: 1 and L0777: 1.		
HNEDP86	785736	8050	170 - 394	17802			H0179: 1 and L0766: 1.		
HNEDO77	955894	8051	1 - 384	17803		Pro-8 to Ala-20, Pro-36 to Ser-43, Ser-79 to Thr-84, Gly-90 to Pro-95.	H0179: 1 and L0764: 1. 19		
HNEDJ03	967115	8052	49 - 351	17804			H0179: 1, L0762: 1, L0806: 7p15 1, L0666: 1 and L0439: 1.	138079, 138079, 139191, 142959, 153880, 180104, 600994, 601649	
HNEDH59	739533	8053	309 - 527	17805			L0439: 5 and H0179: 1.		

HNEDF15	946986	8054	56 - 235	17806	H0179: 1	
					His-8 to Pro-16.	
HNEDD15	973855	9689	443 - 610	19441		
	973858	9690	107 - 265	19442		
	812918	8055	115 - 450	17807	Leu-58 to Lys-63, Ser-72 to Ala-84.	L0530: 2 and H0179: 1.
HNECS71	761415	8056	169 - 363	17808	Gly-29 to Glu-35.	H0179: 1 and L0599: 1.
HNECP28	469521	8057	215 - 424	17809	Thr-50 to Ile-59.	H0179: 1 and L0599: 1.
	470445	9691	141 - 1	19443	His-39 to Arg-47.	
HNECN28	558790	8058	27 - 251	17810	Ser-21 to Gly-28.	H0179: 1
HNECI41	712607	8059	115 - 333	17811	Pro-42 to Glu-49, Arg-65 to Ser-73.	H0179: 1 and L0749: 1.
HNECD74	470015	8060	368 - 508	17812		H0179: 1
	484793	9692	397 - 185	19444		
HNEBY64	514762	8061	480 - 767	17813	Ser-8 to Cys-14, Lys-55 to Cys-61.	H0179: 1
HNEBY10	968455	8062	503 - 318	17814	Leu-3 to Gln-19.	H0179: 1 and L0776: 1.
HNEBN04	927811	8063	168 - 422	17815		H0179: 1 and L0366: 1.
HNEBM59	950732	8064	16 - 327	17816	Thr-48 to Pro-53.	H0179: 1
HNEBM40	868109	8065	237 - 431	17817		H0179: 1
HNEBJ95	529572	8066	2 - 202	17818	Pro-8 to Arg-13, Arg-28 to Gly-36, Pro-49 to Gly-54.	H0179: 1
HNEBJ81	529571	8067	15 - 134	17819	Leu-21 to Glu-28.	AR061: 3, AR089: 2 H0179: 1
HNEBJ67	529573	8068	25 - 126	17820	Glu-21 to Cys-30.	H0179: 1
HNEBJ62	861074	8069	28 - 252	17821	Leu-24 to Ser-40, Leu-68 to Arg-74.	H0179: 1
HNEBJ43	529574	8070	2 - 199	17822	Lys-27 to Glu-34.	H0179: 1
HNEBJ31	529577	8071	35 - 202	17823		H0179: 1
HNEBJ21	529578	8072	1 - 180	17824		H0179: 1
HNEBJ10	968440	8073	3 - 167	17825		H0179: 1 and L0766: 1.
HNEBJ09	529579	8074	42 - 134	17826	Leu-6 to Pro-11.	H0179: 1
HNEBJ07	861072	8075	76 - 282	17827	Ser-10 to Pro-25, Thr-43 to Arg-51, Val-59 to Trp-69.	H0179: 1

HNEBF27	684467	8076	2 - 148	17828	Ser-22 to Ser-27.	H0179: 1		
HNEBF20	529643	8077	2 - 79	17829	Gln-14 to Gly-23.	H0179: 1, L0662: 1, L0652: 1, L0776: 1 and L0758: 1.		
HNEAQ86	575534	8078	181 - 300	17830	Arg-6 to Cys-12.	H0179: 1		
HNEAQ37	507280	8079	1 - 237	17831		H0179: 1		
HNEAN10	968468	8080	143 - 349	17832		H0179: 1 and L0746: 1.		
HNEAK47	529646	8081	65 - 202	17833		H0179: 1		
HNEAF71	761414	8082	1 - 225	17834		H0179: 1 and L0742: 1.		
HNEAA59	738531	8083	222 - 488	17835	Pro-74 to Asn-81.	L0747: 2 and H0179: 1.		
HMWJD93	849419	8084	11 - 262	17836	Val-57 to Glu-62.	H0341: 1 and L0748: 1.		
HMWIZ55	731809	8085	2 - 151	17837		H0341: 1		
HMWIX77	973813	8086	201 - 647	17838	Glu-8 to Glu-15, Pro-43 to His-48.	H0341: 1		
HMWIX37	708676	8087	147 - 275	17839	Gly-5 to Asp-12.	L0747: 2, H0341: 1, L0774: 1, L0657: 1 and L0754: 1.		
HMWIS12	970753	8088	850 - 996	17840	Arg-14 to Leu-21.	L0779: 2, H0341: 1, L0766: 1 and L0515: 1.		
HMWIQ64	842657	8089	505 - 744	17841		L0748: 2 and H0341: 1.		
HMWIQ44	716509	8090	198 - 55	17842	Arg-20 to Asp-37.	H0341: 1		
	716650	9693	86 - 307	19445	Lys-1 to Pro-7.			
HMWIO15	956253	8091	124 - 372	17843	Gln-23 to Thr-29, Cys-61 to Pro-73.	H0341: 1		
HMWIM05	861094	8092	178 - 366	17844	Leu-54 to Gly-63.	AR050: 75, AR054: 68, AR051: 62 H0341: 1		
HMWIL08	959512	8093	3 - 722	17845	Glu-28 to Pro-36, Gly-47 to Gly-56.	H0341: 1, L0741: 1, L0745: 1, L0747: 1 and L0759: 1.		
HMWIK10	964701	8094	184 - 558	17846	Leu-8 to Ser-16.	H0341: 1 and L0769: 1.		
HMWIG75	767332	8095	131 - 331	17847	Pro-10 to Gly-20, Gly-29 to His-35.	H0341: 1		
HMWIG26	861091	8096	2 - 301	17848		H0341: 1		
HMWIG17	663972	8097	4 - 159	17849	Asp-23 to Lys-29.	L0748: 2, H0341: 1 and L0747: 1.		
HMWIG13	657260	8098	19 - 354	17850	Ala-3 to Ser-8, Pro-10 to Gly-19,	H0341: 1	9q34.1	103000, 114350, 120900, 131195.

							Leu-37 to Ser-53, Ser-63 to Cys-70, Pro-82 to Gln-93, Pro-95 to Pro-101.				185000, 189980, 600184, 602575, 602575
HMWIG01	913689	8099	51 - 161	17851					H0341: 1		
HMWID28	419821	8100	3 - 305	17852					H0341: 1 and L0599: 1.		
HMWIA19	928488	8101	1 - 270	17853			Phe-16 to Ser-22, Pro-50 to Pro-56.		AR054: 137, AR050: 129, AR051: 100 H0341: 1		
HMWHZ43	861097	8102	3 - 227	17854			Ile-1 to Pro-15, Leu-43 to Gly-48, Thr-51 to Glu-62, Leu-67 to Asn-75.		H0341: 1		
HMWHW82	779903	8103	55 - 174	17855			Phe-5 to Asp-10.		H0341: 1 and L0748: 1.		
HMWHV36	708099	8104	102 - 254	17856			Ser-9 to Phe-17, His-26 to Arg-32.		H0341: 1 and L0748: 1.	3	
HMWHV12	970742	8105	184 - 420	17857			Ala-22 to Leu-30.		H0341: 1 and L0747: 1.		
HMWHF86	785510	8106	88 - 174	17858					H0341: 1 and L0748: 1.		
HMWHID94	794306	8107	1 - 108	17859					H0341: 1		
HMWHB71	565104	8108	899 - 1129	17860			His-49 to Ala-57.		H0341: 1		
HMWGW79	646280	8109	54 - 377	17861			Thr-1 to Lys-12, Thr-68 to Arg-89.		L0439: 2, H0341: 1 and L0748: 1.		
HMWQG48	861114	8110	185 - 424	17862			Thr-46 to Ile-55.		AR050: 43, AR054: 39, AR051: 38 H0341: 1		
HMWGI79	774806	8111	462 - 262	17863			Arg-18 to His-27.		H0341: 1		
	774828	9694	79 - 285	19446			Glu-7 to Ser-12, Lys-58 to Gly-64.				
HMWGH30	455037	8112	268 - 119	17864					H0341: 1 and L0475: 1.		
	692606	9695	116 - 310	19447			Asp-4 to Ser-14, Lys-41 to Asp-48.				
HMWGE06	935593	8113	133 - 345	17865					H0341: 1 and L0776: 1.		
HMWFFY93	506636	8114	170 - 448	17866					H0341: 1 and L0439: 1.		
HMWFFN80	573608	8115	98 - 205	17867					H0341: 1		
HMWFFN37	861123	8116	58 - 441	17868			Pro-61 to Ala-71, Gly-86 to Asp-92.		H0341: 1, L0070: 1 and L0759: 1.		



HMWFN32	573603	8117	138 - 308	17869	Ala-9 to Ser-14.	H0341: 1		
HMWFI18	666681	8118	197 - 346	17870		H0341: 1 and L0748: 1.		
HMWFG88	592078	8119	46 - 357	17871	Trp-7 to Leu-14.	H0341: 1 and L0748: 1.		
HMWFD86	785629	8120	122 - 412	17872	Asn-4 to His-10, Gly-18 to Leu-34, Ala-48 to Trp-54.	H0341: 1 and L0766: 1.		
HMWFD68	861124	8121	3 - 161	17873	His-1 to Asp-6.	L0749: 2 and H0341: 1.		
HMWFC64	573596	8122	120 - 323	17874	Gly-24 to His-41.	H0341: 1		
HMWET56	812712	8123	2 - 259	17875	Ser-1 to Ser-8.	H0341: 1		
HMWEQ52	728535	8124	62 - 274	17876	Ala-28 to Gly-34.	H0341: 1 and L0766: 1.		
HMWEN61	909931	8125	2 - 322	17877	Glu-6 to Gly-11, Asp-61 to Asn-68, Glu-93 to Asn-102.	AR051: 21, AR054: 15, AR050: 1 H0341: 1		
HMWEI56	733583	8126	3 - 263	17878	Gln-20 to Ala-35.	H0341: 1 and L0756: 1.		
HMWEI53	861141	8127	3 - 137	17879	Lys-1 to Leu-16.	H0341: 1 and L0740: 1.		
HMWEA91	790331	8128	66 - 539	17880	Ser-2 to Cys-15.	L0743: 2, L0777: 2, H0341: 1 and L0740: 1.		
HMWEA10	968105	8129	2 - 235	17881	His-8 to Asp-22.	L0777: 2 and H0341: 1.		
HMWDZ25	678724	8130	2 - 163	17882		H0341: 1 and L0748: 1.		
HMWDR15	660522	8131	1 - 417	17883	Asp-1 to Ile-32, Pro-34 to Pro-39, Leu-43 to Arg-48, Glu-71 to Thr-82, Pro-95 to Pro-102, Glu-114 to Lys-124.	H0341: 1 and L0754: 1.		
HMWDP06	935903	8132	18 - 110	17884		H0341: 1		
HMWDN60	974425	8133	61 - 375	17885	Pro-6 to Gly-11, Gly-54 to Arg-62.	L0756: 2 and H0341: 1.		
HMWDH55	732304	8134	98 - 310	17886	Pro-21 to His-38.	L0749: 2 and H0341: 1.		
HMWCT43	715575	8135	130 - 414	17887		H0341: 1 and L0748: 1.		
HMWCR88	955258	8136	92 - 190	17888	Phe-9 to Cys-17.	L0756: 2 and H0341: 1.		
HMWCH47	720581	8137	112 - 261	17889		H0341: 1 and L0439: 1.		
HMWCH04	615628	8138	2 - 130	17890	Ile-26 to Ser-33.	L0740: 2 and H0341: 1.		
HMWCG38	851630	8139	249 - 494	17891	Gly-1 to Lys-8, Ser-30 to Leu-43, Glu-68 to Gly-77.	H0341: 1 and L0748: 1.		

HMWBZ89	787111	8140	1 - 207	17892	Thr-18 to Lys-24.		H0341: 1 and L0748: 1.		
HMWBT59	893995	8141	3 - 287	17893	Pro-59 to Trp-72.		AR054: 37, AR050: 34, AR051: 33, AR089: 5, AR061: 4 H0341: 1		
HMWBT05	932558	8142	218 - 379	17894			L0740: 2, H0341: 1, L0761: 1, L0517: 1 and L0744: 1.		
HMWBI77	888862	8143	3 - 404	17895			AR054: 18, AR051: 15, AR050: 2 H0341: 1		
HMWBI40	712730	8144	393 - 617	17896			H0341: 1 and L0439: 1.		
HMWBH29	927321	8145	2 - 499	17897			L0749: 2, H0341: 1, L0775: 1 and L0439: 1.		
HMWBG16	859404	8146	2 - 202	17898	Pro-9 to Gly-18.		H0341: 1		
HMWBB42	714114	8147	310 - 423	17899	Gln-3 to Ser-8.		H0341: 1 and L0748: 1.		
HMWAJ04	586507	8148	27 - 395	17900	Val-1 to Leu-19, Pro-23 to Thr-29, Thr-34 to Thr-39, Pro-45 to Asn-54, His-61 to Trp-70.		AR051: 120, AR050: 118, AR054: 100 H0341: 1		
HMVDZ11	966351	8149	2 - 145	17901			S0212: 1, L0744: 1 and L0596: 1.		
HMVDV55	811616	8150	3 - 245	17902			L0439: 2, S0212: 1 and L0748: 1.		
HMVDQ02	919057	8151	209 - 355	17903			S0212: 1, L0774: 1 and L0589: 1.		
HMVDL45	717384	8152	341 - 655	17904	Ser-1 to Gln-17, Tyr-48 to Ser-64, Asp-69 to Lys-84.		L0438: 2, L0439: 2 and S0212: 1.		
HMVDJ60	877124	8153	398 - 661	17905	Glu-29 to Ile-36, Arg-47 to Ser-54, Arg-62 to Ser-67.		S0212: 1, L0756: 1 and L0731: 1.		
HMVDE10	861184	8154	247 - 462	17906			S0212: 1 and L0759: 1.		
HMVCY89	786651	8155	352 - 471	17907			L0748: 5 and S0212: 1.		
HMVCY14	657801	8156	1 - 474	17908			L0748: 3 and S0212: 1.		
HMVCG26	681174	8157	119 - 340	17909	Asp-21 to Leu-27.		S0212: 1, L0471: 1 and		

HMVB77	771974	8158	422 - 577	17910	Asn-2 to Asp-9.	L0754: 1.		
HMVBV16	661692	8159	318 - 461	17911		S0212: 1 and L0439: 1. S0212: 1, L0790: 1, L0749: 1 and L0777: 1.		
HMVBUB9	786118	8160	213 - 452	17912	Tyr-22 to Thr-27.	S0212: 1 and L0439: 1.		
HMVB083	780366	8161	494 - 736	17913	Ala-47 to His-52.	L0747: 2 and S0212: 1.		
HMVB91	790025	8162	94 - 219	17914	Phe-23 to Ala-28.	S0212: 1 and L0754: 1.		
HMVB52	726546	8163	3 - 215	17915		S0212: 1 and L0757: 1.		
HMVB44	716410	8164	264 - 386	17916		L0749: 2 and S0212: 1.		
HMVAT54	888180	8165	86 - 562	17917	Thr-13 to Trp-20, Gly-52 to Leu-59, Gln-138 to Thr-143.	S0212: 1 and L0769: 1.	16p12-p11	108730, 147781, 172471, 186580, 266600, 600760, 600760, 600761, 600761, 602066
HMVAT52	726515	8166	39 - 428	17918	Thr-10 to Cys-25, Ser-39 to Asp-47.	S0212: 1 and L0754: 1.		
HMVAP56	732985	8167	146 - 304	17919	Ser-31 to Ser-43.	L0439: 2, S0212: 1 and L0594: 1.		
HMVAF71	761400	8168	2 - 145	17920		S0212: 1 and L0439: 1.		
HMVAF52	861210	8169	1 - 378	17921	Ile-46 to Ile-51.	S0212: 1 and L0754: 1.		
HMVAC67	751600	8170	527 - 811	17922		L0748: 2 and S0212: 1.		
HMSPH53	861245	8171	2 - 307	17923	Ser-67 to Trp-72.	S0426: 1 and L0783: 1.		
HMSPE04	926800	8172	2 - 250	17924		L0770: 2, L0588: 2, S0426: 1, L0803: 1 and L0602: 1.		
HMSPA30	861265	8173	365 - 189	17925		S0426: 1 and L0749: 1.		
HMSO028	861287	8174	473 - 24	17926		S0426: 1 and L0565: 1.	10q24	157640, 174900, 180250, 186770, 236730, 271245, 278000, 278000, 600095, 600512, 601107, 601130, 602082
HMSOJ88	861292	8175	1 - 471	17927	Glu-9 to Glu-18, Asp-24 to Leu-29, Pro-98 to Ser-112, Ala-115 to Thr-121.	S0426: 1 and L0591: 1.		

HMSOJ01	915084	8176	500 - 775	17928	Pro-33 to Thr-39.	S0426: 1, L0662: 1, L0766: 1, L0748: 1, L0779: 1 and L0759: 1.		
HMSOH03	922828	8177	212 - 397	17929		S0426: 1, L0438: 1 and L0439: 1.		
HMSNP06	934161	8178	249 - 419	17930		S0426: 1 and L0769: 1.		
HMSG04	926845	8179	204 - 431	17931	Leu-1 to Lys-7, Cys-13 to Ser-23, Ser-25 to Gly-48, Thr-57 to Pro-65.	L0623: 1 and S0426: 1.		
HMSMY10	963431	8180	39 - 191	17932	Ala-1 to Tyr-12, Pro-44 to Leu-51.	S0426: 1, L0748: 1 and L0749: 1.		
HMSMW91	861336	8181	1 - 117	17933		S0426: 1 and L0749: 1.		
HMSMW64	861338	8182	22 - 441	17934	Val-3 to Lys-9, Leu-32 to Gln-40, Glu-70 to Gly-83.	S0426: 1 and L0589: 1.		
HMSMO59	861341	8183	148 - 495	17935	Arg-33 to Phe-41, Ser-62 to Lys-67.	L0596: 2 and S0426: 1.		
HMSMN71	927097	8184	3 - 533	17936	Lys-1 to Glu-7, Gln-18 to Asp-33, Leu-44 to Leu-50, Thr-67 to Ala-82, Ser-90 to Ser-98, Leu-130 to Gln-135.	AR061: 7, AR089: 3 L0483: 1 and S0426: 1.		
HMSMN26	861345	8185	2 - 136	17937	Gly-22 to Trp-29.	S0426: 1 and L0748: 1.		
HMSLH07	953390	8186	1 - 96	17938		S0002: 1 and L0521: 1.		
HMSKQ08	861372	8187	184 - 447	17939		S0002: 1		
HMSKH24	495770	8188	372 - 268	17940	Pro-19 to Arg-27.	S0002: 1		
	596892	9696	178 - 390	19448				
HMSJX84	783032	8189	338 - 496	17941	Asn-1 to His-10.	S0002: 1 and L0439: 1.		
HMSJW48	852496	8190	674 - 1159	17942	Pro-52 to Ser-58, Cys-82 to Ala-87, Pro-104 to Ala-114, Pro-123 to Thr-128, Gly-144 to Gly-158.	S0002: 1		
HMSJU80	775416	8191	231 - 395	17943	Lys-18 to Asp-24.	L0748: 3 and S0002: 1.		

HMSIQ40	954003	8192	2 - 331	17944			S0002: 1		
HMSJO72	465884	8193	49 - 270	17945	Leu-52 to Tyr-58.		S0002: 1 and L0748: 1.		
HMSJO43	715274	8194	1 - 63	17946			S0002: 1		
HMSJM02	920070	8195	351 - 1091	17947	Arg-33 to Thr-38.		S0002: 1 and L0597: 1.		
HMSJL53	921263	8196	71 - 433	17948	Lys-13 to Ala-20, Gln-57 to Cys-65.		AR050: 30, AR051: 29, AR054: 23 S0002: 1		
HMSIJ22	495774	8197	581 - 408	17949			S0002: 1		
	855778	9697	353 - 613	19449	Tyr-28 to Gly-34.				
HMSIJ78	772846	8198	170 - 421	17950			S0002: 1 and L0591: 1.		
HMSJD56	868168	8199	219 - 446	17951			S0002: 1 and L0766: 1.		
HMSIZ49	973806	8200	445 - 645	17952			S0002: 1		
HMSIW04	465835	8201	585 - 749	17953			S0002: 1 and L0756: 1.		
HMSIU74	765600	8202	270 - 377	17954			S0002: 1 and L0746: 1.		
HMSIT32	699241	8203	322 - 492	17955			S0002: 1, L0517: 1 and L0756: 1.		
HMSIT28	686663	8204	29 - 217	17956	Ser-29 to Leu-34, Arg-42 to Gly-51.		S0002: 1 and L0439: 1.		
HMSIP20	669671	8205	169 - 300	17957	Gln-13 to Leu-18, Asn-29 to Arg-35.		S0002: 1 and L0599: 1.		
HMSIP02	920079	8206	402 - 223	17958			S0002: 1 and L0749: 1.		
HMSIK04	615218	8207	16 - 201	17959			S0002: 1 and L0766: 1.		
HMSIB06	935151	8208	289 - 47	17960	Trp-1 to Asp-6.		S0002: 1 and L0749: 1.		
	935272	9698	212 - 403	19450	Asn-3 to Trp-10.				
HMSHV11	967007	8209	28 - 153	17961	Tyr-1 to Asn-7.		S0002: 1 and L0605: 1.		
HMSHU68	753038	8210	513 - 271	17962			S0002: 1 and L0757: 1.		
HMSHU37	495778	8211	195 - 1	17963	Leu-40 to Gly-53, Arg-60 to Arg-65.		S0002: 1		
	855786	9699	1 - 282	19451					
	855787	9700	344 - 514	19452					
HMSHT11	967068	8212	348 - 485	17964			L0476: 1 and S0002: 1.		
HMSHO45	717808	8213	57 - 227	17965			S0002: 1 and L0745: 1.		
HMSHI09	709471	8214	359 - 736	17966			S0002: 1 and L0731: 1.		
HMSHI61	741834	8215	111 - 341	17967	Thr-43 to Asp-49.		L0777: 2, S0002: 1, L0745: 1, L0746: 1 and L0750: 1.		

HMSGH08	959461	8216	1 - 150	17968	Pro-11 to Ala-22, Thr-44 to Arg-50.	S0002: 1 and L0742: 1.		
HMSGH06	935496	8217	194 - 349	17969	Thr-13 to Arg-24, Cys-40 to Lys-47.	S0002: 1 and L0758: 1.		
HMSHE81	784966	8218	2 - 430	17970	Ala-4 to Tyr-11, Thr-26 to Pro-38, Ser-56 to Asp-64, Ser-70 to Ser-76.	AR089: 27, AR061: 8 S0002: 1 and L0754: 1.		
HMSHE17	662265	8219	446 - 694	17971	Ser-11 to Thr-18.	AR050: 29, AR051: 29, AR054: 26 L0748: 2 and S0002: 1.		
	847271	9701	418 - 606	19453	Pro-31 to Cys-40, Pro-42 to Glu-48.	S0002: 1		
HMSHD80	882700	8220	273 - 518	17972	Thr-31 to Gly-38, Leu-43 to Asn-55.	L0750: 2 and S0002: 1.		
HMSHB81	777946	8221	424 - 636	17973				
HMSGX86	793163	8222	3 - 158	17974	Ala-21 to Lys-28.	S0002: 1		
HMSGF56	733562	8223	174 - 308	17975	Asp-1 to Asn-9, Leu-31 to Val-39.	L0748: 2 and S0002: 1.		
HMSGF54	730823	8224	265 - 119	17976	Ser-41 to Arg-49.	S0002: 1 and L0362: 1.		
HMSGF51	761922	8225	124 - 333	17977	Gln-20 to Ser-25, Glu-42 to Ile-52.	S0002: 1 and L0592: 1.		
HMSGD24	677337	8226	14 - 136	17978		L0748: 2 and S0002: 1.		
HMSGC85	783608	8227	266 - 21	17979	Lys-22 to His-38, Lys-48 to Arg-59.	S0002: 1, L0779: 1 and L0731: 1.		
	881955	9702	275 - 514	19454	Lys-1 to Ala-10, Gln-53 to Thr-58.			
HMSFY63	745230	8228	184 - 315	17980		S0002: 1 and L0745: 1.		
HMSFX73	888326	8229	97 - 2	17981	Gly-8 to Glu-18.	AR054: 44, AR050: 25, AR051: 19 S0002: 1		
HMSFS08	959773	8230	290 - 421	17982	Glu-1 to Tyr-7.	S0002: 1 and L0758: 1.		
HMSFR23	919890	8231	763 - 1002	17983	Gly-58 to Ala-64.	S0002: 1		
HMSFN08	959774	8232	1 - 282	17984		S0002: 1 and L0794: 1.		
HMSFN68	753635	8233	2 - 88	17985		S0002: 1		
HMSFN13	384695	8234	22 - 222	17986	Leu-1 to His-6.	S0002: 1		

HMSEN08	960147	8235	41 - 244	17987	Gly-2 to Leu-13.	L0748: 3, S0002: 1 and L0601: 1.		
HMSEM34	706366	8236	97 - 333	17988	Glu-5 to Arg-11, Arg-19 to Lys-25, Ser-61 to Gly-69.	S0002: 1 and L0748: 1.		
HMSEL64	842040	8237	73 - 198	17989	Pro-18 to Thr-23, Arg-29 to Asn-34.	S0002: 1 and L0759: 1.		
HMSEG67	751865	8238	163 - 2	17990	Arg-5 to Ser-10.	S0002: 1		
HMSDQ15	660654	8239	2 - 166	17991	Glu-31 to Gln-36.	S0002: 1 and L0748: 1.		
HMSDL70	909997	8240	2 - 307	17992	Pro-12 to Glu-21, Gln-29 to Ser-34.	S0002: 1 and L0741: 1.		
HMSDK10	968435	8241	3 - 164	17993		S0002: 1 and L0756: 1.		
HMSDI34	559991	8242	2 - 154	17994	His-1 to Ser-7.	S0002: 1		
HMSDG12	574950	8243	2 - 238	17995		S0002: 1 and L0741: 1.	19p13.3	108725, 120700, 133171, 136836, 145981, 147141, 164953, 188070, 600957, 601238, 601846, 602216, 602477
HMSDG04	927804	8244	94 - 270	17996		S0002: 1 and L0527: 1.		
HMSDB08	960260	8245	175 - 318	17997	Tyr-15 to Asn-20.	S0002: 1 and L0805: 1.		
HMSDA81	778469	8246	1 - 183	17998	Thr-12 to Ala-17.	S0002: 1 and L0752: 1.		
HMSCY01	921768	8247	1 - 240	17999		S0002: 1 and L0748: 1.		
HMSCW45	723483	8248	3 - 242	18000		L0758: 2, S0002: 1 and L0748: 1.		
HMSCT69	855855	8249	258 - 476	18001		S0002: 1		
HMSCP73	764703	8250	183 - 368	18002		S0002: 1 and L0766: 1.		
HMSCO63	855863	8251	238 - 444	18003	Ser-25 to Pro-31, Ser-45 to Gln-54.	L0748: 2, S0002: 1 and L0762: 1.		
HMSCD07	954243	8252	3 - 161	18004		S0002: 1 and L0592: 1.		
HMSBZ67	973737	8253	1 - 234	18005	Asn-1 to Arg-7.	S0002: 1		
HMSBZ13	855866	8254	2 - 142	18006		S0002: 1 and L0599: 1.		
HMSBY67	752145	8255	213 - 323	18007	Gln-24 to Gly-36.	S0002: 1 and L0777: 1.		
HMSBW54	880721	8256	89 - 289	18008	Leu-1 to Arg-7, Lys-34 to Lys-39.	S0002: 1 and L0766: 1.		

HMSBU24	678709	8257	194 - 475	18009	Asp-4 to Gly-14, Gln-16 to Cys-22, Arg-45 to Trp-56, Val-68 to Val-78.	L0603: 2 and S0002: 1.		
HMSBO95	796724	8258	249 - 377	18010		S0002: 1 and L0749: 1.		
HMSBM92	792970	8259	3 - 140	18011	His-18 to Glu-25.	S0002: 1		
HMSBI82	780229	8260	3 - 188	18012	Tyr-39 to Trp-45.	S0002: 1		
HMSBI56	733772	8261	3 - 68	18013	Asn-11 to Gln-17.	S0002: 1		
HMSBH85	784576	8262	211 - 423	18014	Pro-50 to Cys-55.	S0002: 1 and L0600: 1.		
HMSBH08	958802	8263	981 - 658	18015		S0002: 1		
	958939	9703	451 - 122	19455				
HMSBH07	954457	8264	59 - 382	18016	Gly-30 to Lys-41, Asn-72 to Gly-80.	S0002: 1 and L0655: 1.		
HMSBF92	582654	8265	489 - 253	18017		S0002: 1		
	791382	9704	278 - 475	19456				
HMSBC31	960021	8266	207 - 434	18018	Pro-1 to Lys-14.	S0002: 1 and L0748: 1.		
HMSBA43	715699	8267	43 - 261	18019		S0002: 1, L0766: 1 and L0748: 1.		
HMSAV84	781872	8268	45 - 233	18020		S0002: 1 and L0748: 1.		
HMSAV65	747792	8269	405 - 190	18021		S0002: 1		
HMSAT76	842065	8270	2 - 172	18022	Arg-3 to Ala-15, Ala-26 to Trp-34, Gly-37 to Ser-43.	S0002: 1, L0439: 1 and L0779: 1.		
HMSAQ95	796728	8271	18 - 152	18023	Phe-4 to Ser-11.	S0002: 1 and L0731: 1.		
HMSAQ58	738495	8272	2 - 157	18024		L0740: 2 and S0002: 1.		
HMSAP36	518062	8273	95 - 223	18025	Glu-20 to Glu-26.	S0002: 1		
HMSAO42	714316	8274	74 - 187	18026		S0002: 1 and L0749: 1.		
HMSAH80	781640	8275	71 - 310	18027	Arg-8 to Arg-14, Arg-26 to Thr-33, Ser-50 to Trp-55.	S0002: 1 and L0748: 1.		
HMQDV06	936015	8276	11 - 415	18028	Thr-18 to Gln-26, Pro-44 to Gln-49, Thr-55 to Lys-60, Arg-100 to Asn-107, Pro-115 to Glu-122.	H0250: 1, L0761: 1 and L0800: 1.		
HMQDQ42	457221	8277	1 - 294	18029	Leu-12 to Asp-18,	H0250: 1 and L0748: 1.		



HMQDL40	711421	8278	121 - 255	18030	Cys-62 to Ser-72. Ala-1 to Ser-7, Pro-29 to Gly-39.	H0250: 1 and L0749: 1.	
HMQCZ36	708066	8279	162 - 386	18031		L0748: 2 and H0250: 1.	
HMQCZ18	574068	8280	1 - 297	18032		H0250: 1 and L0743: 1.	
HMQCX42	712966	8281	57 - 266	18033		L0748: 2 and H0250: 1.	
HMQCV29	974683	8282	2 - 499	18034	Pro-7 to Gln-20.	H0250: 1 and L0766: 1.	
HMQCN17	385544	8283	124 - 288	18035		H0250: 1, L0779: 1 and L0591: 1.	
HMQCM46	719201	8284	2 - 136	18036	Lys-6 to Lys-15.	H0250: 1	
HMQCM41	711586	8285	2 - 115	18037	Ser-14 to Tyr-20.	H0250: 1	
HMQCM05	932363	8286	40 - 171	18038		H0250: 1	
HMQCH69	754188	8287	1 - 201	18039		H0250: 1 and L0756: 1.	
HMQCH54	728851	8288	195 - 278	18040		L0747: 2 and H0250: 1.	
HMQCB03	963370	8289	1 - 255	18041		L0498: 2 and H0250: 1.	
HMQBN40	779856	8290	204 - 473	18042		H0250: 1 and L0777: 1.	
HMPTA56	921233	8291	3 - 290	18043	Phe-1 to Gly-7, Lys-9 to Pro-23, Arg-65 to Ala-70, Leu-76 to Gln-82, Leu-90 to Pro-95.	H0109: 1	
HMPTA28	685099	8292	171 - 284	18044	Pro-5 to Met-10.	H0109: 1	
HMPSC38	709222	8293	97 - 330	18045		H0109: 1 and L0748: 1.	
HMPBB84	781863	8294	163 - 345	18046	Glu-51 to Ser-57.	H0061: 1	
HMOAD90	600400	8295	2 - 184	18047	Asp-11 to Glu-16, Asp-30 to Asn-39.	H0191: 1	
HMOAD60	855919	8296	2 - 241	18048		AR054: 2, AR051: 2, AR050: 1 H0191: 1	
HMMCL96	796276	8297	316 - 480	18049		L0748: 1 and H0444: 1.	
HMMCI01	913715	8298	187 - 342	18050	Val-22 to Gly-29.	L0785: 1 and H0444: 1.	
HMMCH69	754902	8299	2 - 112	18051		H0444: 1 and L0605: 1.	
HMMCH09	625366	8300	287 - 595	18052	Gln-40 to Gly-46, Ser-72 to His-78, Pro-93 to Trp-99.	L0748: 1 and H0444: 1.	

HMMCD83	875272	8301	315 - 440	18053	Thr-8 to Lys-20.	L0599: 2, L0369: 1 and H0444: 1.		
HMMCD23	675720	8302	1 - 276	18054		L0754: 1 and H0444: 1.		
HMMCA11	966677	8303	28 - 336	18055	Thr-10 to Gly-17, Ser-59 to Ala-66.	L0749: 1 and H0444: 1.		
HMMCA08	958980	8304	81 - 260	18056	Thr-31 to Asp-44.	L0532: 1 and H0444: 1.		
HMMBZ18	666192	8305	247 - 441	18057		L0748: 7, L0766: 3, L0749: 2, L0717: 1, L0527: 1, L0779: 1 and H0444: 1.		
HMMBZ05	566870	8306	75 - 401	18058	Pro-14 to Ser-20, Gln-80 to Trp-87.	AR051: 53, AR050: 53, AR054: 36 L0759: 1 and H0444: 1.		
	882446	9705	314 - 682	19457	Ser-3 to Thr-8.			
HMMBX01	916067	8307	100 - 270	18059		L0758: 1 and H0444: 1.		
HMMBV08	958987	8308	381 - 223	18060		L0769: 1 and H0444: 1.		
HMMBU13	597147	8309	222 - 344	18061		L0600: 2 and H0444: 1.		
HMMBT64	746399	8310	257 - 421	18062		L0748: 1 and H0444: 1.		
HMMBT30	841959	8311	305 - 583	18063	Ser-72 to Asn-77.	L0766: 1 and H0444: 1.		
HMMBT03	855930	8312	99 - 332	18064		H0444: 1		
HMMBQ08	958988	8313	117 - 281	18065	Pro-8 to Lys-15.	L0740: 1 and H0444: 1.		
HMMBO49	722753	8314	22 - 279	18066		L0754: 1 and H0444: 1.		
HMMBO28	686318	8315	1 - 147	18067		L0748: 1 and H0444: 1.		
HMMBN76	769890	8316	327 - 494	18068	Lys-1 to Ile-7.	L0748: 1, L0749: 1 and H0444: 1.		
HMMBN71	973436	8317	95 - 331	18069	Asn-72 to Leu-79.	H0444: 1		
HMMBN54	729352	8318	135 - 398	18070		L0748: 1 and H0444: 1.		
HMMBM83	781010	8319	19 - 192	18071		L0748: 1 and H0444: 1.		
HMMBL55	731523	8320	221 - 373	18072	Pro-8 to Lys-28, Ile-41 to Cys-48.	L0754: 1 and H0444: 1.		
HMMBH64	746402	8321	2 - 193	18073	Ser-23 to Glu-29, Pro-54 to Asp-63.	L0439: 1 and H0444: 1.		
HMMBF86	812597	8322	2 - 163	18074	Arg-20 to Trp-26, Ser-30 to Glu-43.	L0748: 1 and H0444: 1.	12	
HMMBF72	761389	8323	165 - 317	18075	Lys-16 to Lys-51.	H0444: 1 and L0599: 1.		
HMMBF41	711731	8324	366 - 506	18076		H0444: 1 and L0581: 1.		

HMMAV44	716396	8325	183 - 338	18077	Lys-12 to Arg-18.	L0748: 2 and H0444: 1.	
HMMAT23	973437	8326	3 - 305	18078	Arg-1 to Gly-7.	H0444: 1	
HMMAT08	959005	8327	125 - 343	18079	Gln-19 to Leu-25.	H0444: 1 and L0599: 1.	
HMMAS73	764280	8328	376 - 597	18080		L0756: 1 and H0444: 1.	
HMMAR20	669523	8329	373 - 549	18081	Lys-22 to Gly-27.	L0748: 2 and H0444: 1.	
HMQAQ70	757070	8330	324 - 413	18082		L0748: 1 and H0444: 1.	
HMQAO06	935087	8331	453 - 656	18083	Pro-28 to Asn-33, Phe-46 to Gly-52, Thr-61 to Asn-67.	L0638: 1 and H0444: 1.	
HMMAL71	760206	8332	159 - 425	18084	Pro-79 to Ile-84.	H0444: 1	
HMMAL69	754908	8333	213 - 365	18085	Pro-12 to Gln-19.	L0749: 1, H0444: 1 and L0605: 1.	
HMMAL59	738982	8334	246 - 404	18086	Arg-1 to Glu-7.	H0444: 1	
HMMAL54	729351	8335	241 - 357	18087	Glu-2 to Gly-7.	H0444: 1	
HMMAL44	716407	8336	144 - 320	18088	Thr-9 to Trp-19.	L0662: 1, L0749: 1 and H0444: 1.	
HMMAL42	713542	8337	34 - 183	18089	Lys-24 to Val-30, Thr-44 to Arg-49.	H0444: 1	
HMMAL35	707278	8338	97 - 303	18090	Lys-1 to Gln-6, Ser-27 to Lys-43, Glu-50 to Lys-62.	L0529: 1 and H0444: 1.	
HMMAL30	693545	8339	6 - 80	18091		H0444: 1	
HMMAL18	665512	8340	174 - 356	18092		H0444: 1	
HMMAL16	661699	8341	296 - 412	18093	Ser-1 to Lys-32.	H0444: 1	
HMMAK83	781016	8342	193 - 345	18094	Pro-20 to Phe-25.	L0748: 3, L0749: 1 and H0444: 1.	
HMMAH61	741662	8343	142 - 321	18095		L0748: 1 and H0444: 1.	
HMMAF92	973971	8344	265 - 459	18096		H0444: 1	
HMMAF34	842015	8345	297 - 479	18097		L0762: 1 and H0444: 1.	
HMMAB45	720838	8346	55 - 351	18098		L0748: 4, L0367: 1, L0747: 1 and H0444: 1.	
HMMAB16	856007	8347	117 - 344	18099	Ser-23 to Cys-31.	L0754: 1 and H0444: 1.	
HMMAB96	826488	8348	285 - 563	18100		H0444: 1	
HMCIW93	897377	8349	1 - 306	18101	Arg-1 to Gly-16, Thr-30 to Ser-42.	S0344: 1	

HMCHZ77	771795	8350	2 - 346	18102		AR061: 8, AR089: 5 S0344: 1 and L0748: 1.		
HMCHS34	703691	8351	127 - 273	18103	Arg-18 to Gly-23.	L0748: 3 and S0344: 1.		
HMCHK58	752431	8352	580 - 419	18104		S0344: 1 and L0601: 1.		
HMCGX46	886903	8353	1 - 426	18105	Glu-25 to Asn-32, His-49 to Asn-57.	AR051: 24, AR050: 18, AR054: 10 S0344: 1		
HMCGV66	787512	8354	1 - 216	18106	Tyr-16 to Trp-25, Val-49 to Pro-54, Gln-62 to Leu-68.	S0344: 1 and L0747: 1.		
HMCGF39	856222	8355	1 - 321	18107		L0455: 1, S0344: 1 and L0439: 1.		
HMCFR57	734404	8356	161 - 358	18108		S0344: 1, L0748: 1 and L0756: 1.		
HMCFM86	846578	8357	13 - 171	18109	Ser-30 to Gly-36.	S0344: 1 and L0748: 1.		
HMCFM04	927002	8358	182 - 343	18110	Lys-16 to Trp-22, Gly-39 to Ala-50.	S0344: 1 and L0517: 1.		
HMCND93	791555	8359	185 - 322	18111	Arg-1 to Val-9.	S0142: 1, L0439: 1 and L0746: 1.		
HMCDC70	757192	8360	98 - 373	18112	Thr-10 to Gly-17, Lys-21 to Pro-30, Pro-45 to Ser-55.	S0142: 1 and L0600: 1.		
HMCAR04	925591	8361	225 - 563	18113	His-1 to Ile-14.	S0142: 1 and L0748: 1.		
HMALZ77	856266	8362	2 - 343	18114	Asn-12 to Gln-17, Gly-25 to Ala-34, Lys-72 to Ser-78.	AR089: 1, AR061: 0 S0278: 1 and L0591: 1.		
HMAK06	933960	8363	61 - 222	18115	Gly-31 to Leu-36.	S0278: 1 and L0456: 1.		
HMAJZ39	751523	8364	2 - 280	18116	Glu-13 to Gln-19.	S0278: 1, L0438: 1 and L0604: 1.		
HMAJL09	950168	8365	2 - 493	18117	Tyr-30 to Ser-35, Arg-94 to Gly-100.	AR089: 0, AR061: 0 S0278: 1		
HMAIU90	886821	8366	1 - 453	18118	Arg-41 to Ala-58, Ala-62 to Ser-71, Leu-88 to Gly-96.	AR051: 19, AR050: 17, AR054: 2 S0278: 1		
HMAIQ20	669436	8367	94 - 303	18119	Asn-16 to Asp-21.	L0745: 2 and S0278: 1.		
HMAIH15	956705	8368	534 - 268	18120	Ala-2 to Trp-7,	AR089: 1, AR061: 0		

HMAIA55	899404	8369	89 - 877	18121	Pro-35 to Asp-46. Pro-28 to Cys-34, Asn-153 to Gly-161, Ala-227 to Asn-233.	S0278: 1 AR051: 37, AR061: 9, AR054: 6, AR089: 4, AR050: 1 S0278: 1		
HMAHP37	566344	8370	177 - 440	18122	Gln-17 to Gly-27.	S0278: 1		
HMAGT95	795686	8371	22 - 330	18123	Cys-44 to Ser-52, Arg-96 to Leu-103.	S0278: 1 and L0742: 1.		
HMAGS90	788683	8372	58 - 258	18124	Phe-4 to Leu-11, Pro-14 to Leu-20.	L0777: 2 and S0278: 1.		
HMAGI39	910152	8373	118 - 321	18125		L0776: 2 and S0278: 1.	19q13.4	134790, 191044, 600040, 600138
HMAFF71	760304	8374	2 - 550	18126		L0731: 2, S0144: 1 and L0750: 1.		
HMAFC96	796348	8375	32 - 448	18127	Arg-1 to Ser-13, Gly-24 to Pro-33, Ser-44 to Gln-50.	S0144: 1 and L0748: 1.	11p15.5	125852, 126452, 126452, 141900, 141900, 141900, 141900, 141900, 141900, 142000, 142000, 142200, 142250, 142270, 176730, 176730, 176730, 190020, 191290, 192500, 192500, 194071, 194071, 204500, 600856, 601680, 602631, 602631
HMAEK93	791549	8376	355 - 582	18128	Ser-24 to Lys-39, Trp-52 to Pro-58.	S0144: 1 and L0731: 1.		
HMAEF74	944465	8377	144 - 1145	18129	Gly-5 to Gln-16, Gly-28 to Ser-34, Pro-186 to Pro-196, Ser-213 to Asn-219, Ser-249 to Ile-267.	AR089: 12, AR061: 8 S0144: 1		
HMACZ84	975349	8378	147 - 353	18130	His-7 to Phe-13.	S0144: 1		

HMACV54	922354	8379	421 - 170	18131	Thr-50 to Phe-62, Pro-69 to His-75.	AR089: 21, AR061: 16 S0144: 1 and L0767: 1. S0144: 1 and L0756: 1.		
HMABT55	753560	8380	27 - 275	18132		AR061: 0, AR089: 0 S0144: 1		
HMABD66	388074	8381	138 - 383	18133		L0748: 3 and H0445: 1. L0745: 1 and H0445: 1. L0754: 1 and H0445: 1.		
HLYHN64	970747	8382	26 - 397	18134		L0744: 1, L0748: 1 and H0445: 1.		
HLYHN40	710825	8383	125 - 256	18135	Gly-14 to His-20.	L0747: 2, L0748: 1, L0750: 1 and H0445: 1.		
HLYHL55	731447	8384	213 - 443	18136		AR089: 1, AR061: 1 L0766: 1, L0754: 1 and H0445: 1.		
HLYHK64	746310	8385	87 - 215	18137	Asn-25 to Ile-30.	L0439: 1 and H0445: 1.		
HLYHK61	932994	8386	1 - 549	18138	Lys-61 to Ser-68, Ser-91 to Lys-96.	L0758: 1 and H0445: 1.		
HLYHK34	703776	8387	298 - 519	18139	Lys-37 to Lys-71.	L0766: 1 and H0445: 1.		
HLYHJ37	708625	8388	257 - 421	18140	Pro-16 to Ser-22, Ala-32 to Lys-39.	L0439: 1 and H0445: 1.		
HLYHJ02	919201	8389	232 - 444	18141	Ile-17 to Ser-23, Gln-39 to Ser-57.	L0758: 1 and H0445: 1.		
HLYHI05	953925	8390	424 - 20	18142	Asn-98 to Tyr-105, Lys-130 to His-135.	L0766: 1 and H0445: 1.		
HLYHF62	743058	8391	89 - 277	18143	Asn-13 to Gln-18.	H0445: 1 and L0361: 1.		
HLYHE85	784140	8392	294 - 506	18144	Ser-18 to Cys-33, Asn-36 to His-42.	L0766: 1 and H0445: 1.		
HLYHA48	721372	8393	170 - 466	18145	Asn-1 to Pro-8, Leu-58 to Gln-64.	L0766: 5 and H0445: 1.		
HLYHA04	614848	8394	83 - 229	18146	Ser-17 to Gly-22.	L0748: 2 and H0445: 1.		
HLYGZ71	760115	8395	275 - 613	18147	Gly-8 to Leu-13, Pro-46 to Val-51, Leu-56 to Arg-64, Val-100 to Gln-110.	L0761: 1 and H0445: 1.		
HLYGZ11	966503	8396	194 - 430	18148		L0598: 1, L0648: 1 and H0445: 1.		
HLYGY60	740081	8397	119 - 397	18149		L0748: 2, L0766: 1, L0439: 1, L0750: 1, L0755: 1, H0445: 1 and L0601: 1.		

HLYGW95	795682	8398	110 - 373	18150	Val-15 to Pro-20, Pro-41 to Leu-46, Leu-50 to Leu-57, Gly-63 to His-77, Ser-81 to Gly-87.	L0749: 1, L0777: 1 and H0445: 1.		
HLYGR56	733123	8399	481 - 636	18151		L0731: 1 and H0445: 1.		
HLYGQ29	689972	8400	91 - 213	18152	Lys-14 to Thr-25.	L0754: 2 and H0445: 1.		
HLYGQ11	966539	8401	45 - 194	18153		L0766: 1 and H0445: 1.		
HLYGM76	769835	8402	235 - 450	18154	Thr-13 to Glu-18, Lys-50 to Ile-55.	H0445: 1 and L0362: 1.		
HLYGM08	958820	8403	110 - 3	18155	Lys-6 to Tyr-36.	L0754: 1 and H0445: 1.		
HLYGJ76	685240	8404	388 - 564	18156		H0445: 1 and L0605: 1.		
HLYGH51	871634	8405	162 - 464	18157	Ser-68 to Ala-73.	AR089: 1, AR061: 0 L0748: 1 and H0445: 1.		
HLYGD69	754841	8406	108 - 302	18158	Ala-23 to Gly-28.	L0753: 1 and H0445: 1.		
HLYGB38	709187	8407	19 - 279	18159	Pro-65 to Gln-71.	L0748: 2 and H0445: 1.		
HLYFW38	709185	8408	114 - 392	18160	Leu-7 to Ser-12, Ile-21 to Ala-29, Ser-35 to Ser-41, Pro-43 to Tyr-48.	L0748: 2, L0749: 1 and H0445: 1.		
HLYFU24	856392	8409	362 - 532	18161		H0445: 1 and L0599: 1.		
HLYFR17	859567	8410	271 - 582	18162	Pro-59 to Pro-65.	L0747: 1 and H0445: 1.		
HLYFP56	871637	8411	173 - 391	18163	Ile-47 to Gln-73.	L0766: 3 and H0445: 1.		
HLYFO29	690381	8412	308 - 496	18164	Glu-42 to Ser-52.	H0445: 1 and L0596: 1.		
HLYFE11	966519	8413	103 - 276	18165	Gln-27 to Trp-42.	L0749: 1 and H0445: 1.		
HLYFD51	725116	8414	3 - 548	18166	Thr-4 to Met-17, Ser-21 to Tyr-27, Lys-40 to Asp-56.	L0157: 1, L0766: 1, L0439: 1 and H0445: 1.		
HLYFC54	729299	8415	91 - 249	18167		H0445: 1 and L0600: 1.		
HLYEV46	889678	8416	213 - 443	18168		L0788: 1 and H0445: 1.		
	889804	9706	497 - 757	19458				
HLYEV42	856395	8417	107 - 448	18169	Ser-31 to Asn-37, Gln-46 to Cys-53.	L0748: 1 and H0445: 1.		
HLYET54	729406	8418	281 - 556	18170		L0748: 1 and H0445: 1.		
HLYET48	721501	8419	310 - 429	18171		L0439: 1 and H0445: 1.		

HLYET17	662764	8420	1 - 141	18172			L0748: 1 and H0445: 1.		
HLYES45	717640	8421	296 - 643	18173			L0439: 1 and H0445: 1.		
HLYEP59	739151	8422	228 - 536	18174			L0748: 2 and H0445: 1.		
HLYEO83	781038	8423	214 - 477	18175		Ser-79 to Ile-88.	L0596: 2 and H0445: 1.		
HLYEO37	708623	8424	399 - 551	18176		Thr-12 to Val-19.	L0748: 1 and H0445: 1.		
HLYEL71	760220	8425	296 - 550	18177		Arg-28 to Gln-36.	L0777: 1 and H0445: 1.		
HLYED44	716430	8426	3 - 353	18178		Lys-1 to Trp-7, Pro-31 to Ser-37, Pro-46 to Asn-61, Gly-81 to Thr-90.	L0753: 1 and H0445: 1.		
HLYEC21	670678	8427	2 - 163	18179		Cys-44 to Cys-50.	L0756: 1 and H0445: 1.		
HLYEB11	966748	8428	85 - 351	18180			L0748: 4 and H0445: 1.		
HLYEA92	561537	8429	5 - 115	18181		Asp-13 to Asp-18.	AR054: 16, AR050: 8, AR051: 1 H0445: 1		
HLYEA86	488801	8430	135 - 326	18182		Ser-9 to Ser-14, Phe-40 to Asn-45.	L0748: 1 and H0445: 1.		
HLYEA70	943886	8431	1 - 423	18183		Val-87 to Gln-93, Tyr-123 to Gln-130.	AR054: 15, AR050: 2, AR051: 1 H0445: 1		
HLYEA49	722787	8432	33 - 161	18184		Gln-21 to Ser-27.	H0445: 1 and L0599: 1.		
HLYDY72	761359	8433	275 - 478	18185			H0445: 1 and L0599: 1.		
HLYDX40	856401	8434	94 - 450	18186		Ser-56 to Asn-65, Lys-84 to Arg-91, Lys-114 to Ser-119.	L0740: 1 and H0445: 1.		
HLYDV57	800224	8435	72 - 152	18187		Leu-1 to Arg-6.	L0745: 1 and H0445: 1.		
HLYDU14	658035	8436	281 - 445	18188		Ser-47 to Gly-52.	L0748: 1 and H0445: 1.		
HLYDT27	856405	8437	262 - 453	18189		Leu-58 to Arg-64.	L0758: 2 and H0445: 1.		
HLYDT09	972424	8438	160 - 411	18190		Asp-58 to Ser-65.	H0445: 1		
HLYDQ75	767176	8439	203 - 502	18191		Gln-15 to Leu-36, Lys-78 to Thr-85.	L0749: 1 and H0445: 1.		
HLYDO45	717079	8440	3 - 224	18192			L0518: 5, L0748: 1 and H0445: 1.		
HLYDK95	973370	8441	140 - 376	18193		His-10 to Glu-16, Ser-23 to Cys-30.	H0445: 1		
HLYDI03	923826	8442	197 - 388	18194		Pro-9 to Val-22.	L0041: 1 and H0445: 1.		



HL YDG74	939025	8443	134 - 481	18195	Pro-31 to Gly-43.	L0438: 1, L0439: 1 and H0445: 1.		
HL YDG42	713579	8444	213 - 368	18196		L0748: 1 and H0445: 1.		
HL YDF07	952940	8445	120 - 290	18197		L0761: 1 and H0445: 1.		
HL YDD60	740212	8446	39 - 125	18198	Asn-15 to Asp-29.	L0766: 1 and H0445: 1.		
HL YDB08	959076	8447	20 - 160	18199	His-1 to Gly-9, Thr-13 to Trp-18, Asn-21 to Glu-26.	L0749: 1 and H0445: 1.		
HL YCX70	757087	8448	257 - 604	18200	Ala-8 to Ser-14, Pro-64 to Arg-69.	L0748: 3 and H0445: 1.		
HL YCX34	703910	8449	39 - 227	18201		L0748: 1 and H0445: 1.		
HL YCX18	943714	8450	2 - 412	18202	Arg-7 to Arg-16.	AR061: 113, AR089: 106 L0777: 1 and H0445: 1.		
HL YCX02	919563	8451	1 - 138	18203	Ser-29 to Gly-40.	L0731: 1 and H0445: 1.		
HL YCU59	679219	8452	229 - 405	18204	Thr-49 to Cys-58.	L0756: 2 and H0445: 1.	6p21	180297, 248611, 251000, 263200, 600211, 600701, 601690
HL YCQ43	825509	8453	257 - 466	18205	Arg-64 to Arg-69.	H0445: 1		
HL YCP63	856424	8454	14 - 184	18206	Gly-15 to Thr-21.	L0523: 1 and H0445: 1.		
HL YCO03	923844	8455	157 - 387	18207	Glu-37 to Tyr-42.	L0777: 2, L0731: 2 and H0445: 1.		
HL YCM14	657589	8456	104 - 322	18208	Lys-7 to Arg-12, Phe-35 to Gly-54.	L0748: 1 and H0445: 1.		
HL YCL69	914887	8457	372 - 509	18209		L0748: 1 and H0445: 1.	4q11-q13	103600, 103600, 103600, 104150, 104150, 104500, 125490, 170650
HL YCF51	725067	8458	172 - 396	18210	Glu-16 to Ser-34.	L0769: 2, L0666: 1, L0748: 1, L0747: 1, L0749: 1 and H0445: 1.		
HL YCF37	949401	8459	1018 - 1341	18211	His-1 to Gly-23, Arg-43 to Leu-50, Pro-52 to Glu-59, Leu-77 to Lys-108.	AR089: 31, AR061: 5 H0445: 1		

HL YOC19	668745	8460	229 - 369	18212	Arg-23 to Ser-31, Thr-41 to His-46.	L0748: 1 and H0445: 1.	
HL YCB86	785544	8461	106 - 204	18213		L0754: 1 and H0445: 1.	
HL YCB11	967162	8462	76 - 258	18214		L0731: 3, L0779: 1, H0445: 1 and L0362: 1.	
HL YBX91	790234	8463	587 - 778	18215		L0766: 3 and H0445: 1.	
HL YBV44	485853	8464	80 - 193	18216	Glu-22 to Cys-31.	H0445: 1	
	516686	9707	293 - 448	19459	Ser-1 to Gln-9, Arg-20 to Tyr-34.		
HL YBN17	463988	8465	150 - 317	18217		L0766: 3 and H0445: 1.	
HL YBM44	715879	8466	14 - 328	18218		L0742: 1 and H0445: 1.	
HL YBJ17	664101	8467	221 - 415	18219		H0445: 1 and L0599: 1.	
HL YBH84	856444	8468	165 - 443	18220	Pro-67 to Ser-72, His-75 to Gln-86.	AR054: 14, AR051: 13, AR050: 0 H0445: 1	
HL YBH68	586582	8469	220 - 486	18221	Thr-40 to Ser-57.	AR050: 18, AR054: 11, AR051: 5 H0445: 1	
HL YBG85	783508	8470	1 - 246	18222	Asn-36 to Arg-46.	L0748: 1 and H0445: 1.	
HL YBA50	880734	8471	2 - 232	18223	Thr-23 to Cys-39.	L0766: 2 and H0445: 1.	
HL YBA06	935611	8472	295 - 441	18224		L0521: 1, L0766: 1 and H0445: 1.	
HL YAX75	767225	8473	172 - 294	18225	Arg-25 to Leu-32.	H0445: 1	
HL YAX32	699337	8474	129 - 200	18226	Thr-6 to Asp-19.	L0663: 1, H0445: 1 and L0599: 1.	
HL YAU15	782335	8475	163 - 414	18227	Thr-25 to Ser-30.	L0748: 1, L0752: 1, L0758: 1 and H0445: 1.	
HL YAS35	856469	8476	96 - 293	18228		H0445: 1 and L0592: 1.	
HL YAR25	678179	8477	205 - 378	18229	Thr-52 to Lys-58.	L0777: 1 and H0445: 1.	
HL YAQ92	792770	8478	169 - 303	18230	Asp-33 to Gln-40.	L0740: 1 and H0445: 1.	
HL YAQ70	757235	8479	220 - 483	18231		L0748: 4 and H0445: 1.	
HL YAQ69	754229	8480	1 - 267	18232	Thr-50 to Ile-85.	L0754: 1 and H0445: 1.	
HL YAN68	815950	8481	182 - 337	18233		H0445: 1	
HL YAN21	854034	8482	126 - 302	18234	Lys-6 to Ser-17.	H0445: 1	
HL YAN10	964834	8483	369 - 521	18235		L0761: 1, L0517: 1, H0445:	

HLVAL58	736097	8484	433 - 606	18236			1 and L0599: 1.		
HLVAL22	856473	8485	214 - 456	18237	Ser-1 to Asp-6, Gly-60 to Gly-66.		L0439: 2 and H0445: 1.		
HLVAL11	967173	8486	100 - 294	18238	Gln-35 to Phe-47, Glu-55 to Gln-64.		L0369: 1 and H0445: 1.		
HLYAK36	708028	8487	192 - 356	18239			L0766: 1, L0606: 1 and H0445: 1.		
HLYAK34	421604	8488	36 - 164	18240			L0749: 1, H0445: 1 and L0599: 1.		
HLYAJ49	723039	8489	150 - 383	18241			L0745: 7, L0746: 3 and H0445: 1.		
HLYAG59	888232	8490	157 - 441	18242	Ile-6 to Met-21.		L0483: 1, L0750: 1 and H0445: 1.		
HLTHS37	708613	8491	205 - 432	18243	Asp-1 to Asn-15, Pro-31 to Gly-41.		AR051: 9, AR050: 3 H0445: 1		
HLTHS02	856560	8492	23 - 217	18244	Phe-42 to Thr-49, Ile-51 to Ser-56.		L0748: 2 and H0591: 1.		
HLTHC37	708620	8493	172 - 453	18245	Ser-21 to Glu-27, Asp-38 to Asn-45.		H0591: 1 and L0748: 1.		
HLTGT83	780903	8494	23 - 199	18246			H0591: 1 and L0439: 1.		
HLTGT36	708027	8495	516 - 740	18247			L0796: 2, L0747: 2, H0591: 1 and L0791: 1.		
HLTGS17	662409	8496	350 - 502	18248	Pro-5 to Asn-12.		H0591: 1 and L0748: 1.		
HLTGR28	693990	8497	1 - 231	18249			H0591: 1 and L0748: 1.		
HLTGP47	719975	8498	182 - 379	18250	Gln-36 to Arg-52.		H0591: 1 and L0604: 1.		
HLTGO89	786674	8499	1 - 129	18251	Thr-24 to Ala-30.		H0591: 1 and L0439: 1.		
HLTGN92	791185	8500	153 - 242	18252			L0748: 3 and H0591: 1.		
HLTGA40	710728	8501	153 - 413	18253			L0758: 2, H0591: 1 and L0439: 1.		
HLTEZ30	960911	8502	209 - 331	18254	Leu-18 to Asp-33.		L0748: 2 and H0090: 1.		
HLTEZ19	671610	8503	2 - 172	18255	Ser-2 to Arg-7, Leu-48 to Trp-54.		L0748: 2, L0749: 2, H0090: 1, L0756: 1 and L0758: 1.		
HLTEX27	927578	8504	163 - 327	18256	Pro-27 to Asp-33.		H0090: 1 and L0748: 1.		
HLTEV66	772965	8505	1 - 192	18257	Lys-19 to Asn-38.		H0090: 1 and L0731: 1.		

HLTER45	723375	8506	289 - 426	18258	Arg-1 to Lys-12.	H0090: 1 and L0362: 1.		
HLTEM25	678685	8507	2 - 190	18259	Cys-3 to Lys-11, Ile-30 to Phe-36.	H0090: 1 and L0766: 1.		
HLTEG51	494330	8508	597 - 298	18260		H0090: 1		
	514122	9708	169 - 435	19460				
HLTEG37	417243	8509	2 - 253	18261	Ser-58 to Gly-64.	H0090: 1 and L0789: 1.		
HLTEC83	574630	8510	52 - 165	18262	Asp-5 to Gly-11.	H0090: 1		
HLTEC35	574632	8511	131 - 247	18263	Asn-13 to Pro-21.	H0090: 1		
HLTEA20	669900	8512	298 - 594	18264	Ser-14 to Pro-19.	L0749: 2, H0090: 1, L0438: 1 and L0758: 1.		
HLTDR43	715529	8513	3 - 140	18265	Tyr-8 to Leu-19.	L0438: 2, L0754: 2, H0090: 1, L0803: 1, L0352: 1 and L0439: 1.		
HLTDJ17	577379	8514	370 - 603	18266		H0090: 1, L0766: 1, L0745: 1, L0747: 1 and L0779: 1.		
HLTDH96	796560	8515	165 - 287	18267		H0090: 1 and L0748: 1.	22q13.31	250100, 250800, 250800
HLTDG59	739699	8516	68 - 352	18268		H0090: 1 and L0748: 1.		
HLTDG30	693329	8517	3 - 119	18269	Cys-10 to Pro-16, Glu-34 to Pro-39.	H0090: 1 and L0746: 1.		
HLTDB38	456860	8518	262 - 432	18270		L0748: 2 and H0090: 1.		
HLTCZ55	732385	8519	142 - 270	18271	Pro-38 to Ser-43.	H0090: 1 and L0758: 1.		
HLTCX39	705648	8520	1 - 336	18272		H0090: 1 and L0596: 1.		
HLTCT77	772458	8521	165 - 368	18273		H0090: 1 and L0745: 1.	1p21	102770, 120280, 120280, 166600, 170995, 232400, 232400, 600309, 601414, 601691, 601691, 601691, 601691, 601718, 602094
HLTCR77	772457	8522	154 - 303	18274		H0090: 1 and L0745: 1.		
HLTCR11	967559	8523	3 - 200	18275	Pro-54 to Lys-61.	H0090: 1 and L0363: 1.		
HLTCM59	442563	8524	2 - 208	18276		H0090: 1		
	739501	9709	26 - 241	19461	Lys-11 to Ser-16.			
HLTCI43	715530	8525	3 - 335	18277	Thr-16 to Arg-23,	H0090: 1 and L0439: 1.		

						Ser-35 to Leu-51, Arg-62 to Thr-75, Ser-80 to Ser-88.				
HLTCH11	967541	8526	152 - 295	18278		Gln-1 to Ser-6, Gln-23 to Phe-31.			H0090: 1, L0769: 1 and L0758: 1.	
HLTCH41	507362	8527	93 - 365	18279		Lys-9 to Leu-21, Asn-49 to Arg-55, Gly-62 to Ser-69.			H0090: 1 and L0754: 1.	
HLTBU47	720662	8528	235 - 354	18280					H0090: 1 and L0748: 1.	
HLTBU44	522741	8529	175 - 447	18281		Lys-6 to Ser-13, Arg-29 to Arg-48, Val-50 to Ser-56.			H0090: 1	
HLTBS07	954407	8530	2 - 106	18282					H0090: 1 and L0659: 1.	
HLTBF58	735194	8531	157 - 354	18283					H0090: 1 and L0745: 1.	
HLTBF56	907024	8532	302 - 526	18284		Asn-36 to Arg-48.			L0766: 3 and H0090: 1.	
HLTBA68	753857	8533	241 - 420	18285		Tyr-1 to Lys-6.			L0439: 2, H0090: 1 and L0745: 1.	
HLTBA41	712721	8534	273 - 491	18286		Tyr-44 to Asn-52, Ser-64 to Gln-69.			L0748: 2, H0090: 1 and L0749: 1.	
HLTBA35	707243	8535	124 - 378	18287		Lys-17 to Ser-30, Gln-44 to Glu-52.			H0090: 1 and L0731: 1.	
HLTAM07	954419	8536	3 - 215	18288		Ser-7 to Pro-13.			H0090: 1, L0766: 1 and L0776: 1.	
HLTAK57	735163	8537	1 - 90	18289		Thr-24 to Ser-30.			H0090: 1 and L0756: 1.	
HLTAA39	710361	8538	444 - 647	18290		Cys-1 to Trp-6.			L0740: 2, H0090: 1, L0439: 1 and L0777: 1.	
HLTAA27	684649	8539	3 - 92	18291					L0754: 3 and H0090: 1.	
HLMNU01	916641	8540	223 - 366	18292					H0255: 1 and L0766: 1.	
HLMNQ18	666544	8541	245 - 442	18293					L0749: 3 and H0255: 1.	
HLMMZ09	575837	8542	151 - 324	18294		Gly-1 to Trp-17, Ala-51 to Tyr-58.			H0255: 1	
HLMMT20	830074	8543	80 - 166	18295					L0748: 2, H0255: 1, L0471: 1 and L0766: 1.	
HLMMR90	575905	8544	1 - 522	18296		Gly-1 to Ser-8, Leu-21 to Gly-30.			AR051: 30, AR050: 30, AR054: 20 H0255: 1 and L0599: 1.	

HLMNK61	532605	8545	506 - 129	18297	Gln-9 to Trp-15, Thr-45 to Lys-50, Gln-61 to Leu-66, Trp-79 to Val-87.	AR051: 38, AR054: 35, AR050: 33 H0255: 1		
	856817	9710	197 - 3	19462				
	856818	9711	3 - 263	19463	Cys-1 to Gly-8, Gln-13 to Trp-19, Thr-49 to Lys-54, Gln-65 to Leu-70.			
HLMNK50	724485	8546	1 - 207	18298		H0255: 1, L0534: 1 and L0757: 1.		
HLMNF94	811320	8547	158 - 352	18299	Pro-9 to Lys-16.	H0255: 1 and L0754: 1.		
HLMNMF01	916816	8548	38 - 382	18300		H0255: 1 and L0766: 1.		
HLMNME43	714439	8549	198 - 542	18301	Ser-20 to Arg-25, Gly-51 to Leu-58, Leu-84 to Glu-90.	L0748: 4, H0255: 1, L0761: 1, L0768: 1 and L0747: 1.		
HLMNY59	878870	8550	153 - 356	18302	Val-39 to Asn-49.	H0255: 1		
HLMIG57	835799	8551	209 - 451	18303	Ala-6 to Glu-19, Ser-49 to Leu-56.	AR054: 19, AR050: 10, AR051: 2		
HLMHW80	775382	8552	177 - 446	18304	Pro-1 to Lys-6, Gly-27 to Lys-42.	H0255: 1 and L0754: 1. H0255: 1 and L0748: 1.		
HLMHT61	742044	8553	246 - 398	18305		H0255: 1 and L0754: 1.		
HLMHT49	722191	8554	253 - 411	18306		H0255: 1 and L0581: 1.		
HLMHL66	910804	8555	1 - 252	18307	Pro-32 to Ser-39.	AR050: 11, AR054: 10, AR061: 6, AR089: 3, AR051: 3		
HLMHL03	856859	8556	183 - 1	18308	Lys-1 to Lys-15, Gln-50 to Arg-61.	H0255: 1		
HLMFU46	718075	8557	276 - 443	18309	Arg-14 to Arg-21.	H0255: 1 and L0747: 1.		
HLMFL88	574812	8558	1 - 756	18310	Ala-61 to Glu-70, Pro-90 to Arg-98.	H0255: 1		
HLMFG79	974552	8559	49 - 234	18311	Thr-23 to Gly-29.	H0255: 1		
HLMFE91	531212	8560	3 - 434	18312		H0255: 1		
HLMFE79	531213	8561	190 - 402	18313		H0255: 1		

HLMEF17	531218	8562	2 - 151	18314			H0255: 1		
HLMEF62	754076	8563	140 - 289	18315	Pro-2 to Ser-7, Glu-26 to Pro-31.		L0439: 3 and H0255: 1.		
HLMDX01	921546	8564	160 - 414	18316			H0254: 1, L0748: 1 and L0777: 1.		
HLMDH08	960055	8565	1 - 258	18317	Glu-13 to Ser-22, Ser-34 to Pro-39, Lys-50 to Gly-61, Leu-63 to Lys-68.		L0748: 4, L0770: 2, H0254: 1, L0749: 1, L0777: 1 and L0599: 1.		
HLMDC26	684911	8566	132 - 377	18318	Gly-20 to Lys-32.		H0254: 1 and L0740: 1.		
HLMCL59	529908	8567	59 - 238	18319	Glu-22 to Leu-31.		L0748: 2 and H0254: 1.		
HLMCJ55	741635	8568	3 - 344	18320	Pro-14 to Gly-21, Asp-24 to His-30, Ala-36 to Ala-51.		H0254: 1, L0756: 1 and L0758: 1.		
HLMBX91	879359	8569	94 - 627	18321	Pro-6 to Ser-15, Pro-87 to Arg-105, Gly-165 to Ala-170.		AR051: 13, AR054: 9, AR050: 3 H0255: 1		
HLMBQ54	730952	8570	94 - 369	18322	Arg-9 to Ser-26, Cys-55 to Lys-60.		H0255: 1 and L0748: 1.		
HLMBQ48	560848	8571	175 - 336	18323	Ser-39 to Arg-52.		H0255: 1		
HLMBN04	562006	9712	175 - 336	19464	Ser-39 to Arg-52.				
HLMAV56	615620	8572	84 - 254	18324			H0255: 1 and L0439: 1.		
HLMAI82	733708	8573	305 - 553	18325			L0777: 2 and H0254: 1.		
HLMAE86	523694	8574	3 - 113	18326			H0254: 1		
	852563	8575	88 - 291	18327			H0254: 1, L0766: 1, L0755: 1 and L0731: 1.		
HLLCD85	783454	8576	3 - 527	18328	Pro-2 to Asp-13, Pro-30 to Glu-37, Pro-56 to Lys-76, Lys-83 to Ile-98, Gly-105 to Ser-113, Gln-147 to Glu-152, Asp-154 to Lys-175.		H0354: 1, L0747: 1, L0750: 1 and L0591: 1.		
HLKDC76	953502	8577	157 - 867	18329			H0611: 1, L0740: 1, L0593: 1 and L0601: 1.	19p13.1	143890, 151440, 600173, 600276, 600310, 600310,

HLKDB78	773172	8578	105 - 278	18330	Ser-30 to Arg-39.	L0439: 2, H0611: 1 and L0756: 1.	601604, 601843
HLKDB02	918870	8579	126 - 269	18331	Lys-19 to Arg-36.	H0611: 1 and L0605: 1.	
HLEAN30	843294	8580	161 - 328	18332	Tyr-1 to Tyr-6.	H0073: 1	
	886013	9713	235 - 633	19465	Phe-43 to Met-48, Phe-89 to Trp-95, Ser-118 to Thr-130.		
HLCDA67	887375	8581	1 - 633	18333		AR054: 3, AR089: 2, AR061: 2, AR051: 1, AR050: 1 H0607: 1	
HKBBV11	965170	8582	237 - 398	18334	Ser-1 to Val-6, Gln-23 to Trp-33, Phe-36 to Arg-41.	L0471: 1 and H0625: 1.	
HKBBP05	928316	8583	34 - 171	18335		H0625: 1, L0761: 1 and L0748: 1.	
HKBAL06	934160	8584	265 - 540	18336		L0535: 2, H0625: 1 and L0759: 1.	
HKBAJ12	969644	8585	273 - 497	18337		L0766: 5 and H0625: 1.	
HKBAB02	918568	8586	522 - 226	18338		H0625: 1 and L0764: 1.	
HJUBA59	888006	8587	170 - 478	18339	His-26 to Leu-34, Pro-41 to Thr-54, Asp-64 to Ser-69.	AR051: 97, AR050: 79, AR054: 77 L0748: 3, H0129: 1, L0438: 1, L0439: 1, L0747: 1, L0749: 1, L0756: 1 and L0777: 1.	
HJTRB51	470587	8588	428 - 252	18340		H0022: 1 and L0766: 1.	
	618324	9714	261 - 443	19466			
	724786	9715	269 - 463	19467	Ser-7 to Met-12.		
	724787	9716	367 - 534	19468			
HJPDK80	418622	8589	726 - 914	18341	Pro-16 to Ser-28:	L0766: 2, L0749: 2, H0083: 1, L0777: 1 and L0590: 1.	
HJPDK57	768274	8590	1 - 195	18342	Pro-51 to Ser-56.	H0083: 1	
	857395	9717	597 - 860	19469			
HJPD116	518105	8591	13 - 237	18343	Pro-1 to Pro-17.	H0083: 1 and L0666: 1.	



HJPDE23	574115	8592	45 - 212	18344		H0083: 1		
HJPDD82	857401	8593	475 - 639	18345	Ser-30 to Asn-36.	L0748: 3, L0777: 2, H0083: 1, L0775: 1, L0744: 1, L0759: 1 and L0592: 1.		
HJPCW09	536677	8594	1 - 186	18346		H0083: 1	1q32.1	134580, 145260, 600105, 600759, 601975
HJPCV54	733607	8595	129 - 434	18347		H0083: 1 and L0751: 1.	17qter	
HJPCS54	871807	8596	473 - 619	18348		H0083: 1 and L0750: 1.		
HJPBP22	577455	8597	2 - 145	18349	Arg-39 to Arg-44.	H0083: 1	10q23-q24	157640, 174900, 180250, 186770, 236730, 271245, 278000, 278000, 600095, 600512, 601107, 601130, 601493, 602082
HJPBA04	615585	8598	172 - 423	18350		H0083: 1 and L0608: 1.		
HJPAZ91	882668	8599	1 - 522	18351	Ile-23 to Gly-28, Val-30 to Lys-35.	H0083: 1, L0740: 1, L0754: 1 and L0745: 1.		
HJPAY56	909242	8600	3 - 212	18352		AR061: 4, AR089: 3		
HJPAX11	967599	8601	367 - 483	18353		H0083: 1 and L0593: 1.		
HJPAT79	781697	8602	2 - 325	18354	Thr-4 to Thr-18, Leu-33 to Arg-43, Pro-66 to Gly-79.	H0083: 1, L0803: 1 and L0748: 1.		
HJPAG38	709103	8603	222 - 371	18355	Tyr-39 to Gly-44.	H0083: 1 and L0731: 1.		
HJPA60	586675	8604	3 - 536	18356	Ile-73 to Thr-80, Asn-125 to Gln-136.	L0600: 3 and H0083: 1.		
HJKSC56	578366	8605	248 - 421	18357		AR054: 9, AR089: 1, AR050: 1, AR061: 1, AR051: 0		
HJBDM21	793381	8606	60 - 383	18358	Asn-54 to Gln-60, Phe-92 to Arg-98.	L0731: 2 and H0083: 1.		
HJBDL70	757378	8607	65 - 709	18359	Phe-50 to Ser-58.	H0202: 1		
HJBDG36	607769	8608	347 - 87	18360	Pro-34 to Trp-46.	L0748: 2 and T0042: 1.		
						L0439: 2 and T0042: 1.		
						T0042: 1		

	857433	9718	1 - 222	19470					
	895313	9719	527 - 778	19471					
	902075	9720	1098 - 1544	19472					
HJDBC63	745286	8609	214 - 423	18361	Ile-1 to Arg-12, Arg-14 to Thr-19.			T0042: 1 and L0604: 1.	
HJBD A11	967480	8610	470 - 700	18362	Leu-2 to Cys-13, Ser-32 to Cys-39.			L0777: 2, L0752: 2, T0042: 1, L0659: 1 and L0731: 1.	
HJBCZ05	925805	8611	19 - 867	18363				T0042: 1 and L0740: 1.	
HJBCM55	732411	8612	163 - 456	18364	Arg-1 to Pro-8, Ala-33 to Ala-39.			T0042: 1 and L0748: 1.	
HJBBG54	728810	8613	415 - 570	18365	Leu-5 to Gly-10, Pro-31 to Cys-52.			L0777: 2 and T0042: 1.	
HJBBF02	921242	8614	1 - 630	18366	Ile-1 to Ser-10, Gln-43 to Asp-49, Thr-118 to Thr-124, Ala-141 to Thr-146, Ser-155 to Glu-160.			L0599: 2, T0042: 1 and L0748: 1.	
HJBBE51	725948	8615	86 - 244	18367	Thr-23 to Lys-31.			T0042: 1 and L0748: 1.	
HJBBE07	954376	8616	325 - 471	18368				T0042: 1 and L0753: 1.	
HJBBD59	739633	8617	61 - 240	18369	Pro-1 to Arg-10, Pro-13 to Arg-19.			L0439: 2 and T0042: 1.	
HJBAP94	796835	8618	127 - 330	18370	Pro-22 to Pro-29.			L0591: 2, T0042: 1 and L0748: 1.	
HJACI60	577525	8619	84 - 233	18371				T0041: 1, L0740: 1 and L0754: 1.	
HJACH13	660943	8620	11 - 175	18372				L0439: 3, L0758: 3, L0779: 2, T0041: 1, L0771: 1, L0766: 1, L0803: 1, L0438: 1 and L0749: 1.	
HJABZ11	967665	8621	242 - 448	18373	Val-1 to Ser-8.			L0759: 2 and T0041: 1.	
HJABX39	709556	8622	189 - 656	18374	Pro-10 to Asn-16, Ser-63 to Glu-69, Ala-73 to Cys-79, Phe-83 to Thr-89, Trp-106 to Arg-120.			L0747: 2 and T0041: 1.	
HJABQ75	567249	8623	498 - 836	18375	Ser-1 to Ala-10,			T0041: 1	

						Leu-51 to His-71, Glu-79 to Gly-93.						
HJABK84	783237	8624	1 - 567	18376		Pro-10 to Glu-18, Leu-94 to Pro-100, Ser-106 to Asp-117, Thr-155 to Gly-162, Ser-169 to Val-178.				L0740: 4 and T0041: 1.		
HJABK16	667399	8625	178 - 327	18377		Leu-2 to Asn-11, Glu-24 to Ser-32.				T0041: 1 and L0766: 1.		
HJABB93	791435	8626	40 - 303	18378		Gln-1 to Gly-7, Pro-43 to Gln-61, Cys-68 to Trp-76.				L0748: 2, T0041: 1 and L0756: 1.		
HJAAZ32	699727	8627	92 - 214	18379		Pro-8 to Ala-26.				T0041: 1, L0790: 1, L0748: 1, L0745: 1 and L0759: 1.		
HJAAV85	783412	8628	76 - 183	18380						T0041: 1		
HJAAR02	921105	8629	111 - 269	18381						T0041: 1 and L0784: 1.		
HJAAO07	954263	8630	1 - 186	18382						T0041: 1 and L0385: 1.		
HJAAC22	779388	8631	236 - 409	18383		Met-1 to Pro-7.				T0041: 1 and L0439: 1.		
HJAAA83	928841	8632	241 - 432	18384		Lys-15 to Ser-29, Pro-34 to Pro-53.				L0777: 2, T0041: 1 and L0601: 1.		
HILBQ12	971556	8633	247 - 360	18385						T0002: 1 and L0766: 1.		
HILBC52	906873	8634	3 - 281	18386						L0748: 2 and T0002: 1.		
HILBC17	667204	8635	25 - 285	18387						L0777: 2 and T0002: 1.		
HHEZZ74	934486	8636	542 - 1630	18388		Glu-42 to Ser-70.				L0779: 2, L0800: 1, L0662: 1, L0740: 1, L0596: 1 and H0543: 1.		
HHEZT12	969437	8637	1 - 177	18389		Gln-1 to Lys-8, Val-12 to Cys-17, Met-32 to Phe-38, Pro-40 to Tyr-45.				L0769: 1 and H0543: 1.		
HHEZO92	942859	8638	1 - 546	18390		Val-18 to Trp-24, Ala-64 to Asp-69, Asn-88 to Arg-96, Ser-131 to Gly-137, Gly-150 to Thr-155, Gly-166 to Gly-174.				AR089: 15, AR061: 9 L0639: 1, L0748: 1, L0751: 1 and H0543: 1.		

HHEZN61	973136	8639	429 - 689	18391	Cys-8 to Pro-15, Pro-17 to Leu-23.	H0543: 1		
HHEY64	973232	8640	329 - 601	18392	Trp-2 to Glu-7.	H0543: 1		
HHEX005	930794	8641	972 - 1679	18393	Asp-14 to Glu-25, Tyr-109 to Pro-115, Pro-122 to Gly-127, Thr-142 to Lys-147, Leu-149 to Trp-164.	L0743: 2, L0750: 1, L0759: 1 and H0543: 1.		
HHEWX08	974405	8642	271 - 474	18394	Ser-51 to Pro-60.	H0543: 1		
HHEWX06	933879	8643	77 - 172	18395	Thr-18 to Ile-23.	L0785: 1, L0748: 1 and H0543: 1.		
HHEWT49	973142	8644	109 - 333	18396	Ser-23 to Ala-32, Gln-45 to Phe-52.	H0543: 1		
HHEWS01	914746	8645	241 - 414	18397		L0749: 1 and H0543: 1.		
HHEWQ10	963039	8646	2 - 121	18398	Gly-1 to Gly-6.	L0748: 1, L0749: 1 and H0543: 1.		
HHEWM53	973150	8647	170 - 382	18399	Leu-23 to Ser-35, Pro-66 to Ala-71.	H0543: 1		
HHEWG06	933874	8648	176 - 310	18400	Thr-13 to Phe-18, Asp-22 to Gly-29.	L0748: 1 and H0543: 1.		
HHEVZ06	933891	8649	2 - 193	18401	Asn-10 to His-15.	L0748: 1 and H0543: 1.		
HHEUJ76	906956	8650	544 - 227	18402		L0439: 1 and H0543: 1.		
HHEUP68	973215	8651	308 - 622	18403	Glu-27 to Asp-33, Glu-44 to Leu-51, Thr-59 to Pro-74.	H0543: 1		
HHEUL05	931045	8652	376 - 483	18404	Leu-1 to Ser-6.	L0438: 1 and H0543: 1.		
HHEUD79	774157	8653	3 - 230	18405	Asn-50 to Gly-56.	L0754: 1, L0756: 1 and H0543: 1.		
HHETR81	836730	8654	2 - 718	18406	Gly-1 to Ser-6, Pro-8 to Lys-16, Arg-67 to Cys-84, His-99 to Tyr-107, Met-133 to Cys-138, Pro-164 to Lys-170, Thr-172 to Lys-178.	L0766: 1 and H0543: 1.		
HHETP07	952217	8655	209 - 364	18407	Gly-32 to Phe-39.	L0608: 1 and H0543: 1.		

HHETN89	786361	8656	562 - 687	18408	Glu-11 to Gly-16.	L0747: 1 and H0543: 1.		
HHETN03	923009	8657	306 - 485	18409	Arg-55 to His-60.	L0659: 1 and H0543: 1.		
HHETK38	973120	8658	112 - 369	18410	Arg-1 to Ala-10, Arg-37 to Ser-44, Ser-54 to Asn-61.	H0543: 1		
HHETH36	901275	8659	212 - 424	18411	Gln-1 to Asp-30.	AR050: 13, AR054: 11, AR051: 3 H0543: 1		
HHESV83	780456	8660	3 - 122	18412	Glu-1 to Gly-9.	H0543: 1		
HHESV71	806332	8661	1 - 225	18413		H0543: 1		
HHES93	791729	8662	281 - 436	18414		L0756: 2, L0742: 1 and H0543: 1.		
HHQV46	718640	8663	2 - 286	18415	Lys-15 to Leu-27, Pro-29 to Trp-37, Lys-39 to Glu-54, Gly-61 to Ser-91.	L0766: 1, L0749: 1, L0755: 1 and H0543: 1.		
HHQTO7	952452	8664	1523 - 1738	18416	Gly-8 to Lys-18, Gly-22 to Thr-28, Gly-49 to Ser-54, Gln-56 to Phe-63, Glu-65 to Arg-72.	L0763: 1 and H0543: 1.		
HHQPT75	973104	8665	2 - 307	18417	Arg-15 to Arg-21, Leu-54 to Ser-62, Ser-73 to Phe-81, Glu-91 to Lys-102.	H0543: 1		
HHQL50	723930	8666	215 - 469	18418		L0592: 1 and H0543: 1.		
HHQK53	727812	8667	524 - 703	18419		L0754: 2 and H0543: 1.		
HHBQH22	723305	8668	215 - 370	18420	Thr-14 to Gly-23, His-29 to Phe-35.	L0764: 1, L0745: 1 and H0543: 1.	17q11	147557, 600881, 601954
HHQCB9	786603	8669	229 - 387	18421	Lys-19 to Tyr-28.	L0766: 1 and H0543: 1.		
HHQCB26	679505	8670	344 - 466	18422	Lys-31 to Val-40.	L0749: 1 and H0543: 1.		
HHQB59	738866	8671	196 - 324	18423	Lys-1 to Glu-11.	L0439: 1 and H0543: 1.		
HHQB23	675500	8672	26 - 157	18424		L0773: 1, L0748: 1 and H0543: 1.		
HHQPW95	588266	8673	2 - 181	18425	Ser-52 to Arg-58.	H0543: 1		
HHQPW40	588265	8674	152 - 298	18426		H0543: 1		

HHEPW11	966789	8675	161 - 322	18427			H0543: 1		
HHEPT05	912266	8676	2104 - 2349	18428	Lys-25 to Gln-34.		L0439: 1 and H0543: 1.		
	971711	9721	350 - 174	19473					
	971712	9722	307 - 414	19474					
	971713	9723	425 - 180	19475	Lys-25 to Gln-34.				
	971714	9724	288 - 61	19476	Phe-23 to Gln-48, Lys-56 to Gly-61.				
HHEPT03	923410	8677	41 - 355	18429	Ser-7 to Ser-14.		H0543: 1		
HHEPN71	588241	8678	1 - 249	18430	Leu-53 to Trp-64.		L0752: 1 and H0543: 1.		
HHEPM69	588235	8679	279 - 386	18431			H0543: 1		
HHEPG62	877268	8680	179 - 361	18432	Glu-38 to Asn-44.		L0439: 2, L0777: 2, L0394: 1, L0438: 1, L0744: 1, L0754: 1, L0779: 1, L0753: 1, L0759: 1 and H0543: 1.		
HHEPG59	925436	8681	274 - 474	18433	Phe-7 to Asn-14.		L0748: 1, L0747: 1 and H0543: 1.		
HHEPF21	956241	8682	217 - 357	18434			L0803: 1 and H0543: 1.		
HHEOG81	588155	8683	210 - 365	18435	Glu-19 to Asp-27.		L0755: 1 and H0543: 1.		
HHEOA63	744995	8684	11 - 313	18436			L0748: 3 and H0543: 1.		
HHENY02	919775	8685	206 - 373	18437	Ile-7 to Cys-13.		L0386: 1 and H0543: 1.		
HHENW11	887661	8686	1 - 228	18438	Glu-26 to Lys-38, Ser-55 to Gln-63.		AR050: 71, AR054: 58, AR051: 53 H0543: 1.		
HHENQ08	959262	8687	68 - 259	18439	Thr-44 to Pro-55.		L0748: 2 and H0543: 1.		
HHENK21	858290	8688	2 - 310	18440	Pro-44 to Ser-51.		L0763: 1 and H0543: 1.		
HHENJ29	690576	8689	1 - 306	18441	Asp-4 to Gln-13, Val-22 to Gly-31, Glu-50 to Asp-63, Arg-70 to Asp-75, Ser-88 to Gly-94.		L0750: 1 and H0543: 1.		
HHEND53	728111	8690	196 - 486	18442	His-54 to Ala-59, Ser-64 to Asn-70.		L0439: 1 and H0543: 1.		
HHENC71	757844	8691	142 - 387	18443	Leu-70 to Ser-82.		L0747: 1 and H0543: 1.		
HHEMZ66	586737	8692	2 - 364	18444	Pro-14 to Ala-29, Glu-50 to Thr-55.		AR050: 326, AR054: 257, AR051: 188 H0543: 1		

HHEMW78	773507	8693	738 - 541	18445	Gln-42 to Met-64.	L0766: 1 and H0543: 1.		
HHEMV01	916281	8694	3 - 161	18446		L0748: 2 and H0543: 1.		
HHEMQ68	752326	8695	22 - 123	18447		H0543: 1		
HHEMQ48	493733	8696	287 - 111	18448		AR050: 99, AR054: 97, AR051: 82 H0543: 1		
	839526	9725	1 - 162	19477	Pro-22 to Glu-33.			
	887668	9726	1 - 216	19478	Thr-33 to Gly-40, Pro-59 to Leu-64, Thr-66 to Lys-72.			
HHEMN37	708468	8697	2 - 217	18449	Trp-1 to Ser-11.	H0543: 1		
HHEMK77	772115	8698	3 - 104	18450	Thr-6 to Asn-11, Thr-24 to Lys-34.	H0543: 1		
HHEMK26	681595	8699	120 - 470	18451	Pro-38 to Pro-44, Gln-65 to Ala-73.	H0543: 1		
HHEMJ91	789443	8700	233 - 445	18452	Lys-25 to Lys-34.	L0747: 4, L0439: 1, L0362: 1 and H0543: 1.	6p21.3-p21.2	106300, 108800, 120290, 120290, 120810, 120820, 142857, 142858, 150270, 167250, 170261, 177900, 179450, 201910, 217000, 222100, 233100, 235200, 248611, 256550, 256550, 600202, 600261, 601690, 601868, 602280, 602475
HHEMI69	755006	8701	371 - 174	18453	Pro-2 to Lys-12.	H0543: 1		
HHEMI56	469030	8702	257 - 66	18454	Gln-1 to Lys-13, Asp-54 to Asn-62.	H0543: 1		
HHEMI09	625459	8703	1 - 174	18455	Ser-27 to Gly-34, Ser-49 to Glu-54.	H0543: 1		
HHEMG02	917366	8704	325 - 122	18456		L0769: 1 and H0543: 1.		
HHEMG01	916297	8705	121 - 270	18457	Gln-23 to Val-33,	H0543: 1		

HHHMD56	733353	8706	2 - 292	18458	Gly-44 to His-50. Leu-12 to Ser-17.	L0766: 1, L0748: 1 and H0543: 1.		
HHHEMC41	927255	8707	269 - 42	18459	Val-14 to Gln-19.	L0747: 2, L0753: 2, L0731: 2, L0750: 1 and H0543: 1.		
HHHEMC10	969380	8708	309 - 596	18460	Asn-1 to Glu-7, Ile-70 to Trp-82.	AR050: 98, AR054: 85, AR051: 82, AR089: 28, AR061: 3 H0543: 1		
HHHEMA35	467295	8709	390 - 623	18461	Thr-1 to Lys-9, Gln-60 to Pro-65.	L0748: 1 and H0543: 1.		
HHHEMA07	953200	8710	190 - 369	18462		L0439: 2, L0804: 1, L0777: 1, L0731: 1 and H0543: 1.		
HHHELA35	878217	8711	25 - 462	18463	Phe-62 to Arg-67, Gln-92 to Leu-104.	AR089: 1, AR061: 0 H0542: 1		
HHHEKZ12	878267	8712	9 - 395	18464	Phe-62 to Arg-67, Gln-92 to Leu-104.	AR089: 1, AR061: 0 H0542: 1		
HHHEK170	955092	8713	39 - 215	18465	Phe-1 to Ser-8, Glu-45 to Met-53.	L0754: 1, L0747: 1 and H0542: 1.		
HHHEJR35	878223	8714	1 - 249	18466		L0745: 2 and H0542: 1.		
HHHEHK04	925717	8715	1 - 621	18467	Ser-16 to Gln-22.	L0777: 5 and H0542: 1.		
HHHEHG38	943785	8716	2 - 583	18468	Cys-12 to Gly-19, Gly-28 to Leu-35, Lys-37 to His-42.	AR061: 5, AR089: 4 L0779: 1, L0777: 1 and H0542: 1.		
HHHEGC05	930878	8717	124 - 258	18469	Gln-10 to Arg-17, Pro-34 to Tyr-45.	L0752: 1 and H0542: 1.		
HHHEFN76	767770	8718	1 - 267	18470		L0748: 2 and H0542: 1.		
HHHEFM41	711954	8719	580 - 738	18471	Lys-1 to Lys-8, Arg-22 to Leu-27.	L0586: 1 and H0542: 1.		
HHHEEY63	744592	8720	400 - 537	18472	Arg-1 to Arg-20, Tyr-31 to His-36.	L0759: 1 and H0542: 1.		
HHHEDN70	757106	8721	1 - 390	18473	Thr-63 to Phe-68, Asp-78 to Pro-85.	L0593: 1 and H0542: 1.		
HHHEDN51	734118	8722	205 - 354	18474	Gly-15 to Leu-21.	H0542: 1		
HHHEDN49	588136	8723	274 - 396	18475		L0369: 1 and H0542: 1.		
HHHEDI54	588129	8724	76 - 276	18476		L0749: 1 and H0542: 1.		



HHEDB30	692086	8725	100 - 429	18477	Arg-1 to Gly-9, Gly-12 to Asn-21, Gly-32 to Pro-38.	L0750: 1 and H0542: 1.		
HHECT42	588098	8726	186 - 386	18478	Glu-13 to Glu-18, Pro-36 to Glu-59.	L0594: 2 and H0542: 1.		
HHECM62	934414	8727	148 - 330	18479		L0779: 2, L0596: 1 and H0542: 1.		
HHECA10	973228	8728	66 - 257	18480	Arg-35 to Gly-41.	H0542: 1		
HHBEQ68	752956	8729	3 - 200	18481	Ala-1 to Ala-6, Cys-34 to Gly-42, Cys-56 to Pro-61.	H0542: 1		
HHBEQ59	739216	8730	343 - 140	18482		H0542: 1		
HHBO04	615127	8731	277 - 447	18483	Gln-28 to Leu-33.	H0542: 1		
HHBBM89	786088	8732	44 - 253	18484	Gln-44 to Leu-50, Tyr-52 to Lys-59.	H0542: 1	15q25	231680, 276700
HHBBM53	728087	8733	115 - 294	18485		H0542: 1		
HHBBJ08	858429	8734	163 - 435	18486		L0766: 2 and H0542: 1.		
HHBBB80	775424	8735	209 - 36	18487	Pro-15 to Arg-27, Pro-38 to Lys-51.	H0542: 1		
HHBBB22	858418	8736	85 - 300	18488	His-3 to Arg-9, Pro-15 to Glu-26, Ser-48 to Gly-61.	H0542: 1		
HHBEBA86	785413	8737	1 - 138	18489	Pro-23 to Pro-34.	L0752: 1, L0731: 1, L0605: 1 and H0542: 1.		
HHBEAL37	491205	8738	464 - 240	18490		H0542: 1		
	858421	9727	1 - 303	19479				
	858425	9728	100 - 261	19480	Cys-10 to Leu-16.			
HHBEAJ78	773538	8739	2 - 313	18491	Leu-7 to Cys-14, Glu-22 to Glu-36, Gln-57 to Lys-63, Asp-85 to Leu-97.	L0361: 2 and H0542: 1.	7q21-q22	116860, 126650, 126650, 129900, 133170, 154276, 173360, 173360, 602136, 602136, 602136, 602447
HHBEAF06	935355	8740	169 - 381	18492	Val-3 to Leu-8.	L0518: 4, L0599: 1 and H0542: 1.		
HHBEAD08	959305	8741	536 - 736	18493	Ser-12 to Phe-18.	L0794: 4, L0651: 1 and		

HHRAC20	668948	8742	1 - 459	18494	Ser-16 to Gly-25, Asp-33 to Asn-42, Cys-72 to Ser-85, Glu-98 to Glu-106, Glu-114 to Gly-130.	H0542: 1. H0542: 1		
HHEAA02	932265	8743	26 - 631	18495	Asn-1 to Gly-19, Ala-24 to Arg-30, Phe-53 to Arg-69, Gln-104 to Ser-110, Ser-116 to Thr-123.	L0593: 2 and H0542: 1.		
HFSBE12	970629	8744	132 - 317	18496		H0057: 1		
HFSBB12	971571	8745	424 - 218	18497		H0057: 1 and L0779: 1.		
HFSBB06	960835	8746	326 - 180	18498	Pro-14 to Ala-19.	L0766: 2 and H0057: 1.		
HFSAZ51	725973	8747	453 - 316	18499		L0749: 3, L0748: 2 and H0057: 1.		
HFSAX30	693419	8748	379 - 173	18500		H0057: 1 and L0756: 1.		
HFSAW27	684668	8749	132 - 1	18501		L0794: 2, H0057: 1, L0758: 1 and L0581: 1.		
HFSAU89	785904	8750	444 - 238	18502	Thr-1 to Ala-7.	H0057: 1 and L0748: 1.		
HFSAU84	781861	8751	105 - 1	18503	Leu-16 to Cys-22.	H0057: 1 and L0749: 1.		
HFSAT96	504394	8752	239 - 60	18504	His-3 to Asp-15.	H0057: 1 and L0748: 1.		
HFSAT48	720843	8753	465 - 331	18505	Cys-4 to Phe-10, Lys-40 to His-45.	L0666: 2, L0747: 2, L0731: 2, H0057: 1, L0804: 1, L0791: 1, L0779: 1 and L0780: 1.		
HFSAS86	785851	8754	196 - 107	18506	Tyr-5 to Ser-11, Phe-13 to Asp-23.	L0777: 2, H0057: 1 and L0754: 1.	6p21	180297, 248611, 251000, 263200, 600211, 600701, 601690
HFSAR68	675246	8755	398 - 207	18507	His-1 to Ser-25, Asp-32 to Lys-44.	H0057: 1		
	826790	9729	140 - 319	19481				
HFSAP25	677463	8756	344 - 249	18508	Leu-4 to Ser-10, Thr-19 to Asn-24.	H0057: 1 and L0748: 1.		
HFSAK31	504424	8757	185 - 60	18509	Gln-18 to Tyr-31.	H0057: 1		

HFSAK14	504431	8758	352 - 251	18510	Pro-5 to Ser-14.	L0748: 2 and H0057: 1.		
	504432	9730	72 - 209	19482	Lys-1 to Leu-9.			
HFSAI68	753858	8759	319 - 209	18511		L0748: 2 and H0057: 1.		
HFSAH34	526472	8760	697 - 524	18512		H0057: 1, L0775: 1, L0439: 1, L0740: 1 and L0747: 1.		
HFSAAG03	960973	8761	496 - 320	18513	Glu-33 to Thr-45, Arg-50 to Ser-59.	AR089: 18, AR061: 11 H0057: 1, L0520: 1 and L0389: 1.		
HFSAF53	728528	8762	314 - 96	18514		H0057: 1 and L0588: 1.		
HEOQI52	850966	8763	21 - 323	18515		H0457: 1, L0521: 1, L0766: 1 and L0581: 1.		
HEOPY91	933173	8764	132 - 314	18516	Ala-21 to Ala-34, Ser-38 to Gln-50.	H0457: 1 and L0366: 1.		
HEOOA49	942561	8765	1 - 576	18517	Leu-42 to Asp-50, Pro-94 to Ala-100, Ser-169 to Gly-174.	AR089: 6, AR061: 2 H0457: 1		
HEONX61	741864	8766	2 - 235	18518		H0457: 1 and L0748: 1.		
HEONO64	746660	8767	158 - 427	18519		L0748: 3 and H0457: 1.		
HEONO59	741361	8768	325 - 756	18520		AR089: 5, AR061: 3 H0457: 1 and L0752: 1.		
HEONN02	840210	8769	64 - 225	18521		H0457: 1 and L0740: 1.	2p22-p21	120435, 120435, 126600, 135300, 136435, 152790, 152790, 157170, 182601, 278300, 601071, 601771, 602134
HEONL19	575884	8770	170 - 325	18522		H0457: 1		
HEONL09	961147	8771	3 - 155	18523	Glu-30 to Lys-50.	H0457: 1		
HEONL06	935516	8772	244 - 414	18524		H0457: 1		
HEONK37	707505	8773	62 - 313	18525	Ser-1 to Asn-9.	L0754: 2 and H0457: 1.		
HEONK10	964757	8774	90 - 206	18526		H0457: 1 and L0747: 1.		
HEONJ18	575888	8775	30 - 338	18527	Arg-10 to Asp-15, Gly-33 to Gln-40, Ser-42 to Cys-49, Arg-60 to Asn-66,	H0457: 1		

HEONI92	792772	8776					Gln-81 to Ala-87.					
HEOMX03	922962	8777	330 - 602	18528			Asp-1 to Ser-9.				H0457: 1 and L0603: 1.	
HEOMX01	913683	8778	2 - 559	18530			Val-8 to Arg-18, Glu-40 to His-46, Pro-62 to Cys-69, Ser-105 to Ser-115, Pro-124 to Pro-129, Pro-139 to Ser-145, Ser-163 to Ser-169.				H0457: 1	
HEOMV61	506231	8779	3 - 326	18531			Pro-51 to Ser-65.				H0457: 1	
HEOMQ68	753075	8780	96 - 218	18532			Lys-1 to Phe-11.				H0457: 1 and L0599: 1.	
HEOMQ04	931032	8781	2 - 172	18533							L0756: 2 and H0457: 1.	
HEOML91	667931	8782	63 - 290	18534							H0457: 1	
HEOML76	575927	8783	93 - 224	18535			His-7 to Gln-12, Pro-14 to Lys-21.				H0457: 1	
HEOMH63	745146	8784	80 - 256	18536							H0457: 1 and L0745: 1.	
HEICC56	733383	8785	2 - 100	18537			Pro-1 to Gly-9, Arg-23 to Gln-33.				S0140: 1	
HEIBB84	781994	8786	2 - 406	18538							L0745: 2 and S0140: 1.	
HEIBB31	697987	8787	2 - 142	18539			Leu-29 to Ser-35.				S0140: 1 and L0777: 1.	
HEIBA15	888667	8788	197 - 427	18540							AR050: 12, AR051: 10, AR054: 10 S0140: 1	
HEIAX24	677177	8789	181 - 360	18541			Leu-7 to Gly-12, Glu-23 to Cys-29.				S0140: 1	
HEIAX11	967272	8790	2 - 289	18542			Thr-47 to Asn-55.				S0140: 1 and L0640: 1.	
HEIAU39	861503	8791	1 - 366	18543			Lys-1 to Ser-7, Phe-31 to Arg-43.				L0534: 1, S0140: 1, L0794: 1, L0790: 1 and L0791: 1.	
HEIAR07	953626	8792	186 - 410	18544			Ser-1 to Arg-14, Asp-27 to Gly-32, Gly-42 to Ala-48, Leu-65 to Ala-72.				S0140: 1 and L0592: 1.	
HEIAJ39	705643	8793	61 - 402	18545							S0140: 1 and L0766: 1.	
HEIAI86	785680	8794	34 - 135	18546			Ser-1 to Gly-19.				L0361: 2 and S0140: 1.	
HEIAD76	574163	8795	2 - 169	18547			Leu-11 to Gln-21.				S0140: 1	

HEIAC62	745672	8796	30 - 176	18548	Gln-38 to Gly-45.	S0140: 1		
HDTMJ27	851806	8797	316 - 495	18549		H0486: 1 and L0589: 1.		
HDTLI05	928253	8798	1 - 285	18550	Thr-1 to Met-6, Thr-8 to Asp-15, Thr-22 to Gln-27, His-36 to Val-44, Leu-55 to Asp-75, Ser-80 to Asp-95.	L0766: 3, L0754: 2, L0758: 2, H0486: 1 and L0748: 1.		
HDTLE28	851830	8799	2 - 172	18551	Phe-27 to Lys-34.	H0486: 1 and L0631: 1.		
HDTLB90	969209	8800	293 - 733	18552	Glu-24 to Ser-35.	L0753: 2, H0486: 1, L0774: 1 and L0749: 1.		
HDTKX61	806340	8801	105 - 521	18553	Pro-32 to Ser-46, Asn-58 to Pro-76.	H0486: 1 and L0747: 1.		
HDTTP10	963456	8802	293 - 469	18554	Lys-19 to Arg-25, Phe-27 to Phe-33, Pro-38 to Lys-44, Ser-49 to Asp-56.	H0486: 1, L0648: 1 and L0755: 1.		
HDTJF29	887186	8803	3 - 299	18555	Pro-15 to Gln-30, Pro-45 to Ala-50, Val-62 to Trp-67, Gln-79 to His-99.	AR054: 25, AR050: 21, AR051: 11 H0486: 1, L0779: 1 and L0777: 1.		
HDTJF05	931977	8804	10 - 486	18556	Pro-6 to Pro-18, Ala-35 to His-42, Gly-51 to Ser-58.	L0717: 1 and H0486: 1.		
HDTIO74	933606	8805	3 - 239	18557	Ile-37 to Arg-42.	AR061: 3, AR089: 1 H0486: 1 and L0748: 1.		
HDTIO16	934151	8806	2 - 673	18558	Val-14 to Arg-20, Arg-28 to Gln-33, Arg-106 to Trp-111.	AR089: 31, AR061: 2 H0486: 1		
HDTIG62	851951	8807	3 - 263	18559	Cys-65 to Gly-70.	L0766: 3, H0486: 1, L0749: 1 and L0779: 1.		
HDTIA48	851944	8808	2 - 271	18560	Pro-1 to Asp-20, Glu-25 to Pro-32, Asp-64 to Lys-72, Glu-85 to Leu-90.	H0486: 1 and L0779: 1.		
HDTTHU79	774217	8809	83 - 385	18561	Thr-17 to Arg-41,	L0757: 2 and H0486: 1.		

HDTHS05	926048	8810	462 - 896	18562	Arg-49 to Cys-57. Phe-42 to Gly-57, Ala-60 to Ser-73, Pro-91 to Gly-101, Lys-108 to Gln-116.	H0486: 1 and L0777: 1.		
HDTHP45	841796	8811	23 - 160	18563	Glu-8 to Ser-16.	H0486: 1		
HDTHI02	918728	8812	120 - 266	18564	Ser-29 to Lys-35.	L0759: 3 and H0486: 1.		
HDTHG69	754464	8813	70 - 234	18565		H0486: 1 and L0748: 1.		
HDTHE32	851964	8814	230 - 490	18566		L0790: 2, L0749: 2, H0486: 1 and L0363: 1.		
HDTHA77	771334	8815	458 - 312	18567		L0748: 2, H0486: 1, L0743: 1 and L0731: 1.		
HDGTG62	742828	8816	22 - 180	18568		L0748: 2 and H0486: 1.		
HDTGQ31	697539	8817	3 - 380	18569		H0486: 1 and L0747: 1.		
HDTGH10	963966	8818	140 - 3	18570	Leu-10 to Gln-20.	L0779: 2 and H0486: 1.		
HDTCG27	682687	8819	313 - 429	18571		H0486: 1 and L0748: 1.		
HDTFX46	915075	8820	265 - 501	18572		H0486: 1 and L0748: 1.		
HDFTF42	713399	8821	259 - 474	18573		H0486: 1 and L0766: 1.		
HDTFR93	792077	8822	38 - 298	18574	Glu-39 to Lys-49.	H0486: 1 and L0439: 1.		
HDTFN38	706752	8823	205 - 408	18575	Ser-10 to Tyr-17.	H0486: 1, L0471: 1, L0745: 1 and L0756: 1.		
HDTFI27	682705	8824	92 - 382	18576		L0803: 6, L0805: 2, L0439: 2, H0486: 1, L0809: 1, L0779: 1 and L0777: 1.	12q15-q21	181430, 217300, 600698, 600698, 600698, 600698, 600808, 602116
HDTFG15	913812	8825	40 - 333	18577	Ile-8 to Phe-15, Glu-27 to Met-32, Asp-63 to Trp-72.	L0361: 2, H0486: 1, L0766: 1 and L0439: 1.		
HDTEI62	587822	8826	111 - 332	18578		H0486: 1, L0745: 1 and L0746: 1.		
HDTEJ57	872215	8827	1 - 429	18579	Gly-1 to His-9, Ala-33 to Pro-39.	L0741: 2 and H0486: 1.		
HDTDS89	799881	8828	120 - 233	18580		H0486: 1		
HDTDS44	799863	8829	138 - 266	18581	Lys-8 to Pro-13.	H0486: 1		
HDIDP20	883680	8830	1 - 384	18582	Leu-60 to His-67.	L0483: 2 and H0486: 1.	7q32	180105, 190900, 222800, 246900

HD TDP02	919572	8831	1 - 255	18583	Pro-10 to Ser-20.	H0486: 1 and L0756: 1.		
HD TDL15	851999	8832	15 - 245	18584	Thr-61 to Asn-69.	L0546: 4, H0486: 1 and L0779: 1.		
HD TDJ44	587742	8833	179 - 439	18585		L0746: 2, L0753: 2, H0486: 1, L0606: 1 and L0745: 1.		
HD TDG89	799870	8834	221 - 382	18586	Gln-27 to Val-34.	H0486: 1		
HD TDD88	615173	8835	113 - 439	18587	Arg-23 to Arg-29, Arg-40 to Pro-54.	H0486: 1		
HD TDD72	587710	8836	162 - 371	18588		AR089: 159, AR061: 142 H0486: 1	113721, 247200, 600059, 601545	
HD TDD70	757088	8837	327 - 446	18589	Asn-21 to Arg-37.	H0486: 1		
HD TDD67	754739	8838	3 - 335	18590	Glu-1 to His-9, Ala-11 to Thr-19.	H0486: 1		
HD TDD15	668754	8839	9 - 188	18591		H0486: 1	15q22	102578, 109700, 151670, 154550, 601780
HD TDC74	799868	8840	138 - 305	18592	Leu-2 to Lys-8, Ala-19 to Gly-35, Pro-37 to Asn-45, Lys-50 to Gln-56.	H0486: 1		
HD TDC64	799871	8841	219 - 389	18593		H0486: 1		
HD TDC38	706741	8842	335 - 523	18594	Ala-26 to Ser-36.	L0748: 2 and H0486: 1.	6q26-q27	100678, 147280, 152200, 167000, 173350, 173350, 173350, 180020, 600320, 600883, 602544
HD TDC30	692063	8843	15 - 290	18595		H0486: 1		
HD TDB37	587699	8844	105 - 404	18596	Glu-1 to Ser-10, Ser-24 to Ala-29.	H0486: 1, L0471: 1, L0745: 1 and L0777: 1.		
HD TDB21	587700	8845	258 - 61	18597	Ile-15 to Asn-24, Lys-61 to Lys-66.	L0747: 2, H0486: 1 and L0766: 1.		
HD TCC55	934923	8846	195 - 911	18598	Ser-26 to Ser-32.	H0486: 1 and L0766: 1.		
HD TCC01	916455	8847	371 - 562	18599		H0486: 1, L0506: 1, L0508: 1, L0493: 1 and L0758: 1.		
HD TBZ83	842950	8848	2 - 454	18600	Arg-1 to Gly-15.	H0486: 1		

HDTBV06	935393	8849	37 - 198	18601			H0486: 1 and L0809: 1.		
HDTBU73	764410	8850	538 - 720	18602	Gly-24 to Ile-30.		H0486: 1, L0748: 1 and L0747: 1.		
HDTBT35	706730	8851	1 - 306	18603			L0521: 2, H0486: 1, L0740: 1, L0756: 1 and L0779: 1.		
HDTBS91	789425	8852	2 - 520	18604	Glu-1 to Leu-18.		H0486: 1 and L0439: 1.		
HDTBS45	591589	8853	289 - 2	18605			L0749: 2, H0486: 1, L0637: 1 and L0748: 1.		
HDTBR39	705350	8854	452 - 742	18606			H0486: 1 and L0758: 1.		
HDTBP84	783024	8855	78 - 275	18607	Leu-1 to Ala-6.		H0486: 1 and L0750: 1.		
HDTBM53	727526	8856	25 - 150	18608			H0486: 1		
HDTBM31	697918	8857	136 - 372	18609	Glu-18 to Cys-23, Asp-74 to Ser-79.		L0750: 2 and H0486: 1.		
HDTBK62	742603	8858	45 - 221	18610	His-26 to Cys-41, Lys-54 to Lys-59.		H0486: 1		
HDTBG80	916167	8859	173 - 478	18611	Lys-34 to Arg-41.		H0486: 1 and L0362: 1.		
HDTBD67	899636	8860	252 - 1175	18612	Pro-20 to Pro-29, Phe-42 to Val-52, Leu-106 to Pro-113, Arg-134 to Gly-139, Ala-207 to Asn-213, Thr-227 to Phe-239.		AR054: 32, AR051: 10, AR089: 3, AR061: 2, AR050: 2 H0486: 1		
	902517	9731	2 - 838	19483	Phe-13 to Val-23, Leu-77 to Pro-84, Arg-105 to Gly-110, Ala-178 to Asn-184, Thr-198 to Phe-210.				
HDTAU14	658429	8861	66 - 176	18613			H0486: 1 and L0745: 1.		
HDTAT80	911928	8862	105 - 281	18614	Gly-44 to Thr-50.		H0486: 1		
HDTAP53	728216	8863	234 - 329	18615			H0486: 1 and L0748: 1.		
HDTAH15	840327	8864	180 - 476	18616			H0486: 1, L0747: 1 and L0731: 1.		
HDTAE60	810259	8865	36 - 167	18617	Val-32 to Gln-37.		H0486: 1 and L0748: 1.		
HDTAE44	799902	8866	260 - 397	18618			H0486: 1 and L0438: 1.		
HDTAE29	780991	8867	99 - 332	18619			H0486: 1		
HDTAE16	661997	8868	206 - 439	18620	Ala-12 to Ser-17,		H0486: 1		



HDTAE09	799874	8869	153 - 305	18621	Ser-24 to Ser-30, Pro-73 to His-78.	H0486: 1	Xq13.1-q13.3	304040, 305100, 305450, 309605, 312760, 314250, 314580
HDTAB89	786039	8870	113 - 310	18622		H0486: 1 and L0748: 1.		
HDTAA31	937609	8871	1100 - 1432	18623	Arg-3 to Asp-9, Pro-49 to Gly-54, Ser-65 to His-70, Lys-78 to Lys-111.	AR089: 14, AR061: 4 H0486: 1 and L0779: 1.		
	941948	9732	1100 - 1432	19484	Arg-3 to Asp-9, Pro-49 to Gly-54, Ser-65 to His-70, Lys-78 to Lys-111.			
HDRAC08	963325	8872	224 - 33	18624	Ser-6 to Ser-11, Thr-55 to Pro-60.	H0537: 1 and L0439: 1.		
HDQPR06	936658	8873	2 - 202	18625	Ser-8 to Glu-20, Glu-26 to Glu-36.	H0522: 1, L0751: 1, L0777: 1 and L0594: 1.		
HDQPP57	926953	8874	64 - 180	18626	Lys-34 to Ser-39.	H0522: 1 and L0748: 1.		
HDQII08	958252	8875	338 - 469	18627	Arg-8 to Ile-13.	H0521: 1 and L0749: 1.		
HDQHU84	782202	8876	1 - 171	18628		L0748: 3 and H0521: 1.		
HDQHO94	793387	8877	1 - 126	18629	Pro-15 to Gly-25, Gly-29 to Trp-41.	L0766: 1 and H0521: 1.		
HDQHJ04	926978	8878	3 - 614	18630	Ser-8 to Ser-21, Thr-46 to Asp-55, Lys-91 to Gly-97, Glu-103 to Asp-115, Glu-125 to Ala-135, Pro-137 to Ser-143, Lys-154 to Phe-163.	L0370: 1 and H0521: 1.		
HDQGW10	963512	8879	46 - 267	18631	Ser-1 to Trp-9, Gln-35 to Lys-40.	L0367: 1, H0521: 1 and L0439: 1.		
HDQGF78	772952	8880	352 - 480	18632	Gln-30 to Pro-35.	H0521: 1 and L0748: 1.		
HDQFT10	852587	8881	121 - 324	18633	Ser-63 to Lys-68.	L0375: 1 and H0521: 1.		
HDQFJ39	852593	8882	197 - 469	18634	Gly-74 to Thr-80.	L0766: 1 and H0521: 1.		

HDQFE93	791724	8883	870 - 1046	18635			L0439: 4, H0521: 1 and L0740: 1.		
HDQEX85	875473	8884	2 - 409	18636			H0521: 1, L0748: 1 and L0749: 1.		
HDQEW83	780551	8885	2 - 283	18637			L0731: 2 and H0521: 1.		
HDQEW11	966126	8886	190 - 2	18638		Ser-5 to Thr-11, Cys-21 to Gly-26, Arg-51 to Gly-63.	L0519: 1 and H0521: 1.		
HDQET29	852618	8887	77 - 274	18639		Gly-11 to Lys-22.	H0521: 1 and L0748: 1.		
HDQEQ10	963533	8888	380 - 550	18640		Pro-41 to Thr-48.	L0766: 2, L0545: 1 and H0521: 1.		
HDQEI46	957666	8889	424 - 266	18641			H0521: 1 and L0748: 1.		
HDQEF93	791753	8890	121 - 369	18642		Gly-21 to Val-28.	L0743: 3 and H0521: 1.		
HDQDX89	786323	8891	2 - 709	18643		Gly-16 to Gln-27, Asn-40 to Ser-54, Ser-71 to His-79, Ile-102 to Leu-107, Glu-114 to Gln-120, Gly-127 to Gly-137, Pro-160 to Lys-177, Gln-187 to Thr-199.	L0740: 2 and H0521: 1.		
HDQDT10	963482	8892	432 - 283	18644		Pro-4 to Asp-9.	H0521: 1, L0749: 1 and L0779: 1.		
HDQDG73	761957	8893	209 - 418	18645		Thr-10 to Asn-15, Pro-31 to Pro-42, Pro-47 to Thr-52.	H0521: 1 and L0750: 1.		
HDQDC74	764985	8894	136 - 270	18646		Tyr-21 to Ala-28.	H0521: 1 and L0588: 1.		
HDPYQ08	958454	8895	139 - 357	18647			L0384: 1, H0521: 1 and L0779: 1.		
HDPXZ28	686188	8896	462 - 665	18648			L0794: 2, L0770: 1, L0638: 1, L0773: 1, L0804: 1, L0805: 1, H0521: 1, L0745: 1, L0755: 1 and L0731: 1.		
HDPXW88	631353	8897	357 - 187	18649		Cys-3 to His-8, Pro-11 to Gln-21.	L0766: 1 and H0521: 1.		
HDPXO03	923602	8898	375 - 521	18650		Lys-1 to Asn-9.	H0521: 1 and L0748: 1.		

HDPXN01	915919	8899	69 - 230	18651	Ser-48 to Ser-53.	AR089: 9, AR061: 4 L0794: 5, L0439: 2, L0747: 2, H0521: 1, L0779: 1, L0777: 1 and L0594: 1.		
HDPXL71	760140	8900	27 - 275	18652	Ala-21 to Asp-30.	H0521: 1 and L0745: 1.		
HDPXD40	974493	8901	129 - 320	18653	Glu-5 to Cys-16.	H0521: 1		
HDPXD08	958826	8902	124 - 336	18654	Val-2 to Glu-10, Gln-62 to Arg-71.	L0766: 1 and H0521: 1.		
HDPXC56	974490	8903	76 - 564	18655	Gln-2 to Leu-8, Thr-30 to Pro-41.	H0521: 1		
HDPXB75	786320	8904	2 - 382	18656	Glu-61 to Gly-66, Thr-75 to Gln-82.	H0521: 1		
HDPWX53	727595	8905	2 - 301	18657		H0521: 1, L0748: 1 and L0756: 1.		
HDPWT92	791223	8906	331 - 567	18658	Gly-1 to Ser-6, Ser-21 to Ser-37.	H0521: 1 and L0748: 1.		
HDPWR03	923608	8907	261 - 28	18659	Met-20 to Arg-30, Pro-54 to Glu-65.	H0521: 1 and L0752: 1.		
HDPWN56	733129	8908	3 - 425	18660	Arg-24 to Asp-33, Pro-45 to Glu-55, Glu-81 to Gln-102, Leu-111 to Met-120.	H0521: 1 and L0743: 1.		
HDPWK75	793234	8909	36 - 299	18661	Pro-1 to Pro-10.	H0521: 1 and L0754: 1.	20q13.1	256540, 600281, 600281
HDPWH75	956201	8910	34 - 309	18662	Pro-32 to Pro-43.	L0748: 2 and H0521: 1.		
HDPVC01	915816	8911	323 - 595	18663		H0521: 1 and L0759: 1.		
HDPWU82	921279	8912	216 - 91	18664	Gln-22 to Asp-29, Pro-37 to Thr-42.	H0521: 1 and L0439: 1.		
HDPUV65	747646	8913	248 - 538	18665	Lys-10 to Pro-19, Ile-28 to Ala-33.	H0521: 1 and L0439: 1.		
HDPUV11	966558	8914	436 - 618	18666		L0439: 3, L0748: 2 and H0521: 1.		
HDPUR51	914406	8915	233 - 3	18667	Gly-12 to Asn-17, Ala-67 to Lys-77.	L0599: 2, L0766: 1, L0775: 1, L0776: 1, H0521: 1, L0749: 1, L0779: 1, L0777: 1, L0759: 1, L0480: 1 and		

HDPUN39	957580	8916	1819 - 1067	18668	Leu-18 to Ser-24, Pro-46 to Glu-51, Ala-81 to Glu-89.	L0596: 1. AR089: 2, AR061: 1 L0755: 2, L0662: 1 and H0521: 1.		
HDPUI44	715971	8917	53 - 250	18669		L0748: 2, L0749: 2, L0664: 1 and H0521: 1.		
HDPTO65	747206	8918	37 - 294	18670	Thr-72 to Lys-81.	H0521: 1 and L0608: 1.		
HDPTL59	739068	8919	14 - 388	18671	Arg-8 to Gly-17.	H0521: 1 and L0581: 1.		
HDPTB43	715038	8920	192 - 419	18672	Lys-22 to Ser-31.	H0521: 1 and L0599: 1.	3q25-q29	106165, 165500, 222900, 276902
HDPTD58	735750	8921	298 - 462	18673		H0521: 1 and L0748: 1.		
HDPSW93	973098	8922	103 - 330	18674	Trp-2 to Ser-9.	H0521: 1		
HDPSW82	779614	8923	25 - 417	18675	Gln-7 to Gln-15, Arg-61 to Cys-75, Ser-82 to His-92.	L0749: 2 and H0521: 1.		
HDPSL71	969286	8924	157 - 294	18676	Thr-18 to Gly-23, Val-27 to Gly-32.	L0648: 1, L0803: 1, L0774: 1, L0659: 1, L0665: 1, H0521: 1 and L0758: 1.	1q22-q24	104770, 107300, 107670, 110700, 131210, 136132, 145001, 146790, 159440, 159440, 159440, 173610, 186780, 191030, 191315, 600923, 601412, 601518, 601652, 602491
HDPSK64	746370	8925	1 - 633	18677	Arg-13 to Ser-30, Thr-40 to Asp-52.	H0521: 1 and L0749: 1.		
HDPSK53	727586	8926	1 - 474	18678	Leu-25 to Gln-32, Ile-48 to Glu-53, Glu-69 to Cys-78.	L0601: 2 and H0521: 1.		
HDPSI13	656729	8927	257 - 394	18679		H0521: 1 and L0748: 1.		
HDPSB10	961309	8928	1 - 444	18680	Met-14 to Pro-24, Lys-31 to Glu-36, His-70 to Gly-76.	AR089: 1, AR061: 0 L0665: 1 and H0521: 1.		
HDPSA86	785293	8929	452 - 219	18681		H0521: 1 and L0439: 1.		
HDPRW01	915993	8930	91 - 294	18682	Gly-1 to Ser-6,	H0521: 1 and L0731: 1.		

HDP RS89	887682	8931	3 - 341	18683	Gln-23 to Ser-38.	AR050: 58, AR054: 55, AR051: 47 H0521: 1		
HDP RR24	914667	8932	111 - 410	18684	Asn-54 to Lys-63, Thr-69 to Phe-74, Tyr-98 to Ser-108.	H0521: 1 and L0745: 1.		
HDP RK07	948672	8933	12 - 158	18685	Arg-1 to Thr-11, Ser-19 to Leu-25.	L0766: 1, H0521: 1 and L0779: 1.		
HDP RJ04	909040	8934	3 - 419	18686	Lys-21 to His-27, Phe-44 to Arg-55, Lys-72 to Lys-80, Glu-88 to Thr-94.	AR089: 0, AR061: 0 H0521: 1 and L0758: 1.		
HDP RE41	712124	8935	378 - 232	18687	His-20 to Thr-25.	H0521: 1 and L0754: 1.		
HDP RA51	725103	8936	2 - 175	18688	Arg-27 to Ser-32.	H0521: 1		
HDP QV82	779421	8937	13 - 327	18689	Gly-5 to Gly-11, Lys-38 to Lys-43.	H0522: 1 and L0748: 1.		
HDP QR07	952337	8938	500 - 604	18690		H0522: 1 and L0779: 1.		
HDP QI68	955006	8939	14 - 508	18691	Glu-42 to Asp-47, Gly-54 to Gly-61, Pro-67 to Asn-73, Lys-145 to Asn-151.	L0752: 2, L0659: 1, H0522: 1 and L0779: 1.		
HDP QH06	934616	8940	66 - 275	18692	Arg-12 to Arg-20, Phe-34 to Lys-45, Pro-65 to Asp-70.	L0794: 1 and H0522: 1.		
HDP QF03	923120	8941	5 - 748	18693		AR054: 9, AR050: 7, AR051: 2 L0769: 1, H0522: 1, L0744: 1 and L0754: 1.		
HDP QC63	744461	8942	18 - 302	18694	Asn-16 to Arg-21, Arg-35 to Ile-41.	H0522: 1 and L0748: 1.		
HDP QA64	872237	8943	3 - 266	18695	Pro-6 to Arg-19, Pro-25 to Cys-30, Pro-33 to Arg-40.	H0522: 1 and L0596: 1.		
HDP PP29	690497	8944	138 - 1	18696	Ser-30 to Gly-45.	H0522: 1 and L0759: 1.		
HDP PB17	662917	8945	1 - 387	18697	Pro-17 to Gly-34, Asp-59 to Val-72, His-77 to Asp-87.	H0522: 1 and L0740: 1.		

HDPOX03	923856	8946	320 - 132	18698	Ser-107 to Thr-121.	H0522: 1 and L0749: 1.		
HDPOI78	773487	8947	223 - 456	18699	Asn-9 to Asn-15. Ser-1 to Tyr-7, Tyr-19 to Val-25, Leu-30 to Thr-35, Ile-47 to Asn-56, Ile-68 to His-75.	L0753: 2, H0522: 1, L0740: 1 and L0750: 1.		
HDPOP03	923843	8948	185 - 439	18700	Thr-10 to Tyr-15, Gly-66 to Ile-81.	H0522: 1 and L0756: 1.		
HDPOC02	919597	8949	344 - 631	18701	Arg-16 to Gly-22.	L0439: 2, H0522: 1, L0779: 1 and L0731: 1.		
HDPNJ73	764407	8950	1 - 228	18702	Val-1 to Ser-12, Ser-18 to Arg-23.	H0522: 1 and L0603: 1.		
HDPND09	607575	8951	323 - 165	18703	Arg-20 to Asp-25, Gly-37 to Val-47.	H0522: 1		
	874076	9733	308 - 18	19485	Pro-8 to Arg-13, Thr-39 to Gln-48.			
	897723	9734	425 - 291	19486	Glu-22 to Cys-28, Leu-40 to Lys-45.			
HDPNC22	674539	8952	407 - 715	18704	Glu-1 to Glu-6, Asp-11 to Gln-18, Pro-20 to Tyr-25, Pro-27 to Lys-38.	L0748: 6, L0749: 2, H0522: 1 and L0752: 1.		
HDPMV35	706647	8953	191 - 349	18705		H0522: 1 and L0752: 1.		
HDPMR81	493958	8954	422 - 189	18706	Ala-1 to Pro-11, Lys-18 to Leu-31, Met-59 to Arg-64.	H0522: 1		
	584265	9735	1 - 282	19487	Thr-2 to Glu-9, Ser-11 to Lys-16, Ile-65 to Arg-77.			
HDPMH51	725029	8955	3 - 224	18707	Asn-14 to Tyr-22, Lys-44 to Ser-50.	L0746: 3, H0522: 1 and L0748: 1.		
HDPMG46	934144	8956	274 - 2	18708		H0522: 1 and L0780: 1.		
HDPLY29	849526	8957	224 - 439	18709	Glu-35 to Tyr-46.	L0766: 2 and H0521: 1.		
HDPLU84	782061	8958	163 - 318	18710	Lys-9 to Gln-14, Thr-40 to Cys-49.	H0521: 1 and L0748: 1.		

HDPLT62	973945	8959	405 - 809	18711			AR089: 1, AR061: 0 H0521: 1		
HDPKI78	773469	8960	19 - 126	18712			H0521: 1 and L0749: 1.		
HDPKA03	923841	8961	267 - 407	18713			L0740: 4, L0777: 2, L0803: 1 and H0521: 1.		
HDPJX07	952966	8962	350 - 574	18714		Gly-2 to Gln-12, Asp-68 to Asp-73.	L0769: 1, L0803: 1, H0521: 1 and L0758: 1.		
HDPJP44	716466	8963	91 - 360	18715		Asp-43 to Cys-50.	L0803: 7, L0794: 5, L0804: 5, L0775: 3, L0789: 2, L0805: 1, L0776: 1, L0809: 1, H0521: 1, L0747: 1, L0779: 1 and L0758: 1.		
HDPJK23	488326	8964	2 - 355	18716		Lys-74 to Arg-80.	H0521: 1 and L0757: 1.		
HDPJB19	887886	8965	3 - 293	18717		Gln-12 to Lys-19.	AR050: 112, AR051: 76, AR054: 75 H0521: 1		
HDPJA07	953001	8966	46 - 243	18718		Ser-2 to Ser-10.	H0521: 1 and L0745: 1.		
HDPJW95	933240	8967	181 - 774	18719		Gln-66 to Asn-71, Ala-130 to Gln-135, Leu-137 to Asn-144, Thr-154 to Ser-163.	L0779: 2, H0521: 1, L0745: 1 and L0758: 1.		
HDPJIV34	703959	8968	328 - 489	18720		Thr-9 to Asn-19.	H0521: 1 and L0754: 1.		
HDPJQ24	771939	8969	141 - 485	18721		Arg-17 to Gly-23, Ala-37 to Ser-46, His-78 to Leu-85, Ser-103 to Lys-110.	H0521: 1 and L0595: 1.		
HDPJP06	935198	8970	444 - 569	18722			H0521: 1 and L0748: 1.		
HDPJL73	764344	8971	34 - 213	18723		Phe-1 to Thr-7, Gly-46 to Leu-59.	H0521: 1		
HDPJL01	916221	8972	206 - 343	18724		Gly-19 to His-27.	H0521: 1		
HDPJF78	881960	8973	130 - 360	18725			H0521: 1		
HDPJF66	750575	8974	51 - 443	18726		Cys-48 to Gln-60, Gln-78 to Gln-86.	H0521: 1	19p13.3	108725, 120700, 133171, 136836, 145981, 147141, 164953, 188070, 600957, 601238,

												601846, 602216, 602477
HDPIF54	729441	8975	239 - 469	18727							H0521: 1 and L0439: 1.	
HDPID88	415993	8976	2 - 241	18728							H0521: 1	
HDPID53	728058	8977	222 - 401	18729							H0521: 1	
HDPIA21	827350	8978	1 - 192	18730							H0521: 1	
HDPHF37	706622	8979	54 - 209	18731							H0521: 1	
HDPHA89	786078	8980	111 - 437	18732							L0745: 2, H0521: 1, L0741: 1 and L0746: 1.	
HDPHA40	711126	8981	1 - 162	18733							H0521: 1 and L0749: 1.	
HDPHA37	812336	8982	2 - 508	18734							H0521: 1	
HDPHA34	704036	8983	264 - 512	18735							H0521: 1 and L0748: 1.	
HDPGX15	660089	8984	43 - 315	18736							H0521: 1	
HDPGX10	964519	8985	419 - 550	18737							L0766: 1 and H0521: 1.	
HDPGX03	924010	8986	242 - 388	18738							H0521: 1	
HDPGT96	973363	8987	1 - 237	18739							H0521: 1	
HDPGS93	792256	8988	239 - 466	18740							H0521: 1	
HDPGS45	921381	8989	24 - 236	18741							L0748: 3 and H0521: 1.	
HDPGS43	715232	8990	39 - 212	18742							L0794: 1, L0766: 1, H0521: 1, L0750: 1, L0777: 1 and L0759: 1.	
HDPGS16	909833	8991	188 - 460	18743							AR061: 0, AR089: 0 H0521: 1 and L0758: 1.	



HDPGS01	916352	8992	58 - 204	18744	Pro-6 to Gly-13.	H0521: 1		
HDPGR44	468389	8993	1 - 225	18745	Gly-1 to Ile-10, Pro-22 to Gly-27.	H0521: 1		
HDPGN15	394693	8994	195 - 389	18746	Pro-20 to His-25, Arg-55 to Cys-61.	H0521: 1		
HDPGN13	416046	8995	1 - 147	18747	Gly-27 to Asn-32, Gly-42 to Pro-49.	H0521: 1		
HDPGN11	966923	8996	300 - 166	18748		L0766: 1 and H0521: 1.		
HDPGJ49	722903	8997	119 - 310	18749		H0521: 1 and L0748: 1.		
HDPGI75	766618	8998	156 - 302	18750	Arg-18 to Gln-24.	H0521: 1		
HDPGI74	765524	8999	87 - 209	18751	Pro-18 to Lys-35.	H0521: 1		
HDPGH73	764397	9000	2 - 118	18752	Glu-6 to Gly-11, Lys-18 to Ile-32.	H0521: 1		
HDPGG01	916389	9001	282 - 115	18753		H0521: 1 and L0604: 1.		
HDPGD28	879489	9002	223 - 441	18754	Phe-19 to Asp-28.	H0521: 1, L0748: 1 and L0749: 1.		
HDPFZ70	709684	9003	482 - 775	18755	Leu-40 to Gly-93.	AR054: 199, AR051: 196, AR050: 193, AR089: 22, AR061: 4 H0521: 1		
HDPFW02	872273	9736	289 - 522	19488		H0521: 1		
HDPFS71	919306	9004	211 - 2	18756	Ala-60 to Gly-70.	H0521: 1		
HDPFS59	486744	9005	481 - 329	18757		H0521: 1		
HDPFP96	486737	9006	65 - 196	18758	Lys-38 to His-43.	H0521: 1		
	796360	9007	116 - 226	18759	Gly-1 to Lys-6, Phe-9 to Thr-17, Lys-27 to Thr-33.	H0521: 1 and L0581: 1.		
HDPFP71	760327	9008	374 - 655	18760	Thr-10 to Cys-17, His-39 to Gly-46, Arg-58 to Ser-71.	L0747: 2 and H0521: 1.		
HDPFP14	486765	9009	127 - 321	18761		H0521: 1		
	495698	9737	446 - 279	19489	Ser-18 to Thr-25, Pro-35 to Ser-40.			
HDPFN23	486738	9010	315 - 455	18762		H0521: 1		
	495721	9738	346 - 149	19490	Ala-1 to Glu-16, Pro-37 to Ala-45,			

HDPFM28	486766	9011	1 - 243	18763	Pro-47 to Lys-54. Ser-5 to Ser-14, Ser-34 to Gly-45, Gly-51 to Cys-56.	H0521: 1		
HDPFL52	495724	9739	477 - 223	19491				
	486739	9012	43 - 198	18764	His-17 to Cys-22.	H0521: 1		
	495697	9740	195 - 1	19492	Lys-1 to Lys-7, Pro-45 to Arg-54, Asp-60 to Pro-65.			
HDPFJ58	783957	9013	229 - 74	18765	Ile-87 to Ile-94.	H0521: 1 and L0750: 1.		
HDPFD10	964521	9014	270 - 632	18766		H0521: 1, L0777: 1 and L0759: 1.		
HDPFB03	936331	9015	326 - 607	18767	Tyr-12 to Gly-17, Tyr-75 to Asp-81.	L0776: 1, H0521: 1 and L0748: 1.		
HDPDH08	959303	9016	155 - 352	18768		H0521: 1 and L0588: 1.		
HDPDD12	970592	9017	379 - 164	18769	Thr-30 to Asn-35.	L0770: 11, L0775: 1, L0787: 1, L0666: 1 and H0521: 1.		
HDPDC90	590161	9018	101 - 241	18770	Val-3 to Tyr-17.	H0521: 1		
HDP CY47	950991	9741	564 - 785	19493				
	775412	9019	2 - 358	18771		H0521: 1 and L0750: 1.		
HDP CP89	786075	9020	2 - 175	18772	Ala-1 to Arg-6, Thr-30 to Ser-43.	H0521: 1		
HDP CP64	746527	9021	138 - 332	18773		H0521: 1		
HDP CP48	721620	9022	317 - 418	18774		H0521: 1		
HDP CP46	719014	9023	210 - 356	18775		H0521: 1		
HDP CP43	715227	9024	198 - 446	18776	Pro-1 to Asn-6, Asp-19 to Lys-35.	H0521: 1		
HDP CP16	416032	9025	263 - 421	18777		H0521: 1		
HDP CO12	852847	9026	80 - 310	18778		H0521: 1		
HDP CN88	416035	9027	219 - 365	18779	Lys-28 to Thr-33.	H0521: 1		
HDP CN73	764400	9028	1 - 138	18780		H0521: 1		
HDP CN33	416028	9029	169 - 351	18781		H0521: 1		
HDP CM66	852849	9030	50 - 472	18782	Thr-6 to Gly-11, Pro-29 to Met-40.	H0521: 1	16q12-q13	114835, 132700, 172490, 600968

HDPCM62	454740	9031	137 - 382	18783	His-1 to Asn-12, Pro-14 to Pro-27, Asn-33 to Ser-39, Pro-41 to Asn-46, Pro-74 to Pro-82.	AR061: 159, AR089: 121 H0521: 1	1p34.1-p32	120550, 120570, 120575, 120950, 120960, 121800, 130500, 133200, 138140, 171760, 171760, 178300, 187040, 255800, 600101, 600650, 600650, 600722, 600722
HDPC145	974424	9032	221 - 382	18784		H0521: 1		
HDPC85	973314	9033	7 - 222	18785		H0521: 1		
HDPCG33	495711	9034	509 - 330	18786	Gly-3 to Asn-15.	H0521: 1		
	852850	9742	8 - 190	19494	Gln-29 to Tyr-45.			
	852872	9743	122 - 304	19495				
HDPCB67	878776	9035	3 - 299	18787	Glu-11 to Ala-20, Gly-74 to Pro-80.	H0521: 1 and L0747: 1.		
HDPBQ75	466645	9036	1 - 429	18788	Glu-22 to Asp-29, Asp-53 to Ser-63, Met-95 to Arg-104, Thr-115 to Asn-126.	H0521: 1 and L0600: 1.		
HDPPBP64	746537	9037	3 - 218	18789	Ile-2 to Gln-7, Val-37 to Lys-44, Lys-58 to Ser-64.	H0521: 1 and L0439: 1.		
HDPB131	852885	9038	400 - 546	18790		H0521: 1 and L0751: 1.		
HDPPBF15	852880	9039	189 - 28	18791	Thr-18 to Ile-37.	H0521: 1 and L0751: 1.		
HDPPBE85	783544	9040	3 - 224	18792	Cys-27 to Asn-41.	L0748: 4 and H0521: 1.		
HDPAAX21	670893	9041	278 - 418	18793		H0521: 1 and L0599: 1.		
HDPAV46	719027	9042	103 - 291	18794	Glu-22 to Thr-27, Pro-38 to Thr-43, Lys-52 to Gln-57.	H0521: 1 and L0596: 1.		
HDPAAP04	615193	9043	128 - 370	18795		H0521: 1 and L0748: 1.		
HDPAO68	972332	9044	1054 - 752	18796	Lys-28 to Ser-38, Arg-51 to Gly-64.	AR061: 30, AR089: 13 H0521: 1		
HDPAO64	746550	9045	305 - 457	18797		H0521: 1 and L0439: 1.	9q13-q21	190100, 200150, 229300, 229300,

												600429, 600884, 600974, 600998, 602014
HDPAN94	901123	9046	242 - 463	18798					AR050: 3, AR051: 2, AR054: 0 H0521: 1 H0521: 1			
HDPK09	494170	9047	143 - 48	18799			Arg-3 to Gly-16.		H0521: 1			
	852903	9744	321 - 464	19496								
HDPJ64	881654	9048	46 - 324	18800			Cys-38 to Pro-44, Glu-50 to Ser-56.		H0521: 1			
HDPAH17	663779	9049	122 - 331	18801			His-57 to Glu-63.		L0748: 2, L0747: 2, H0521: 8q 1 and L0749: 1.			
HDPAF40	856391	9050	442 - 567	18802					L0599: 2 and H0521: 1.			
HDPAC90	787296	9051	1 - 216	18803					L0605: 2, H0521: 1, L0748: 1, L0745: 1 and L0747: 1.			
HDPAC78	773570	9052	109 - 213	18804					H0521: 1 and L0748: 1.			
HDPAB34	581900	9053	358 - 2	18805			Cys-72 to Thr-79, Thr-105 to Gly-119.		H0521: 1			
	959495	9745	2 - 169	19497								
	959496	9746	1 - 39	19498								
HDPAA80	775417	9054	89 - 310	18806					H0521: 1 and L0748: 1.			
HDPAA38	546575	9055	184 - 2	18807			Lys-51 to Gly-61.		H0521: 1			
HDLBE11	966230	9056	109 - 2	18808			Thr-1 to Gly-6, Gln-13 to Phe-20.		H0485: 1 and L0751: 1.			
HDLAX74	765091	9057	277 - 516	18809			Gly-1 to Gln-8, Leu-17 to Cys-26, Pro-38 to Gln-47, Ser-59 to Gly-66.		L0753: 3 and H0485: 1.			
HDLAX52	726241	9058	615 - 794	18810					H0485: 1 and L0731: 1.	10q		
HDLAW58	735559	9059	111 - 395	18811			Asn-78 to Tyr-83.		H0485: 1 and L0759: 1.			
HDLAV11	852919	9060	122 - 256	18812					H0485: 1 and L0766: 1.			
HDLAG57	565105	9061	211 - 441	18813			Arg-9 to Gly-20.		H0485: 1			
HDLAC67	751699	9062	1 - 141	18814			Asn-14 to Ile-19.		H0485: 1			
HDLAC51	799888	9063	261 - 428	18815			Leu-20 to Asn-25, Leu-41 to Asn-51.		H0485: 1			
HDLAC30	799891	9064	3 - 209	18816			Asp-1 to Arg-18.		H0485: 1			

HDLAAS8	736081	9065	297 - 491	18817			H0485: 1		
HDCBF12	969401	9066	1 - 189	18818	Ser-16 to Ser-21.		H0637: 1 and L0658: 1.		
HDCBD07	951948	9067	1 - 180	18819	Phe-6 to Thr-11.		H0637: 1 and L0666: 1.		
HDCAN06	933818	9068	3 - 176	18820			H0637: 1 and L0601: 1.		
HDCAG61	852968	9069	80 - 298	18821			H0637: 1 and L0518: 1.		
HDBAK09	625387	9070	316 - 546	18822	Asn-6 to Arg-11.		H0578: 1 and L0755: 1.		
HDBAA11	966723	9071	283 - 459	18823	Leu-3 to Gln-9.		L0717: 1 and H0578: 1.		
HCWVH01	915420	9072	78 - 194	18824			H0589: 1 and L0753: 1.		
HCWVA80	974488	9073	1 - 135	18825	Glu-1 to Gln-22.		H0589: 1		
HCWUS57	974462	9074	104 - 433	18826	Leu-28 to Ser-33, Thr-57 to Lys-63, Lys-75 to Trp-84, Thr-94 to Gly-103.		H0589: 1		
HCWUS50	974467	9075	328 - 516	18827	His-26 to Gln-39, Leu-53 to Tyr-61.		H0589: 1		
HCWUQ81	853002	9076	285 - 518	18828	Val-10 to Gly-15.		H0589: 1 and L0748: 1.		
HCWUQ10	964080	9077	1 - 207	18829	Ser-31 to Gly-45, Glu-60 to Asn-65.		H0589: 1, L0775: 1 and L0758: 1.		
HCWUP62	743064	9078	218 - 430	18830			H0589: 1, L0743: 1 and L0744: 1.		
HCWUM01	974466	9079	1 - 243	18831	His-71 to Pro-77.		H0589: 1		
HCWUL35	706530	9080	69 - 191	18832	Ala-7 to His-12.		L0777: 2 and H0589: 1.		
HCWUI49	722674	9081	152 - 367	18833	Glu-16 to Arg-21, Pro-35 to Ala-41.		H0589: 1 and L0596: 1.		
HCWTP17	662486	9082	16 - 225	18834	Ser-23 to Lys-29, Ser-55 to Asp-68.		H0589: 1 and L0740: 1.		
HCWTL02	919252	9083	99 - 308	18835	Leu-2 to Ser-9.		H0589: 1 and L0759: 1.		
HCWSC38	706523	9084	194 - 547	18836	Ala-6 to Leu-11, Leu-70 to Ser-83.		H0305: 1 and L0758: 1.		
HCWLA43	927571	9085	130 - 324	18837			H0305: 1 and L0748: 1.		
HCWKI71	888167	9086	2 - 322	18838	Thr-7 to Ser-35.		AR050: 1, AR051: 1, AR054: 1 H0305: 1		
HCWKS70	757172	9087	44 - 142	18839	Thr-14 to Gln-25.		H0305: 1		
HCWKS35	706518	9088	147 - 332	18840	Phe-1 to Leu-6.		H0305: 1		

HCWKR86	784705	9089	263 - 376	18841	Gln-32 to Gly-38.	H0305: 1		
HCWKR85	783555	9090	138 - 284	18842	Arg-6 to Leu-13, Cys-20 to His-27, Lys-41 to Pro-47.	H0305: 1		
HCWKR62	742602	9091	121 - 255	18843	Leu-21 to Gly-26, Ser-35 to Cys-42.	H0305: 1		
HCWKR51	725027	9092	79 - 225	18844		H0305: 1		
HCWKR14	658421	9093	128 - 334	18845	Ser-8 to Pro-19.	H0305: 1		
HCWKQ09	625546	9094	57 - 314	18846	Gln-39 to Trp-47.	H0305: 1, L0748: 1 and L0749: 1.		
HCWKI72	760628	9095	62 - 169	18847		H0305: 1 and L0741: 1.		
HCWKD85	783545	9096	38 - 202	18848	Arg-26 to Ile-36.	H0305: 1 and L0757: 1.		
HCWKC61	741803	9097	2 - 241	18849	Lys-1 to Ser-16, Arg-24 to Ser-32, Glu-49 to Asp-58, Ala-67 to Thr-74.	L0748: 2, L0749: 2 and H0305: 1.		
HCWHN53	728248	9098	148 - 345	18850		H0305: 1 and L0731: 1.		
HCWHF76	838528	9099	448 - 693	18851	Lys-1 to Trp-10, Cys-34 to His-41, Thr-48 to Glu-62.	AR051: 31, AR050: 26, AR054: 20 H0305: 1		
HCWGY56	732688	9100	99 - 230	18852		H0305: 1 and L0748: 1.		
HCWGU65	747198	9101	535 - 116	18853		H0305: 1		
	747199	9747	86 - 301	19499	Ser-11 to Cys-20, Leu-27 to Val-36.			
HCWGR02	920121	9102	1 - 291	18854	Ile-1 to Asp-7.	H0305: 1, L0803: 1 and L0599: 1.		
HCWGE86	974476	9103	348 - 530	18855		H0305: 1		
HCWGE85	783528	9104	238 - 360	18856	Pro-34 to Gln-39.	H0305: 1 and L0749: 1.		
HCWGA64	746153	9105	30 - 152	18857		H0305: 1		
HCWFOV07	953582	9106	32 - 430	18858	Asn-14 to Glu-22, Arg-30 to Ala-37, Ser-45 to Gly-74.	H0305: 1, L0779: 1 and L0758: 1.		
HCWFU40	710419	9107	49 - 291	18859		H0305: 1 and L0777: 1.		
HCWFM44	716726	9108	108 - 584	18860	Arg-2 to His-13.	L0754: 2, H0305: 1 and L0748: 1.	19q13.2	107741, 113900, 122720, 122720, 126340, 126391.

									160900, 164731, 173850, 207750, 248600, 258501
HCWFK37	800389	9109	128 - 304	18861		Pro-19 to Gln-25, Lys-45 to Leu-52.	AR050: 18, AR054: 12, AR051: 8 H0305: 1 H0305: 1		
HCWFI71	489879	9110	2 - 328	18862		Thr-78 to Ala-86, Pro-98 to Gln-109.	H0305: 1		
HCWFE35	722467	9111	2 - 370	18863		Arg-1 to Arg-6.	L0740: 2, H0305: 1, L0157: 1 and L0755: 1.		
HCWFA63	578898	9112	1 - 237	18864		Gly-6 to Glu-14, Cys-24 to Phe-29.	H0305: 1		
HCWFA51	584725	9113	1 - 234	18865		Gly-6 to Glu-14, Cys-24 to Phe-29.	H0305: 1		
HCWFA35	908820	9114	50 - 364	18866		Lys-19 to Thr-26.	AR089: 13, AR061: 6 H0305: 1		
HCWFA27	578899	9115	86 - 349	18867		Gln-2 to Ser-7, Leu-20 to Lys-26.	H0305: 1		
HCWFA03	921938	9116	244 - 381	18868			H0305: 1		
HCWEW92	573389	9117	1 - 129	18869		Leu-20 to Thr-34.	H0305: 1		
HCWEW68	849928	9118	125 - 268	18870		Ala-29 to Glu-39.	H0305: 1		
HCWES28	685585	9119	2 - 127	18871			H0305: 1		
HCWER13	586984	9120	29 - 187	18872			H0305: 1		
HCWEQ61	741989	9121	2 - 301	18873		Glu-26 to Gln-31, Lys-41 to Glu-50.	H0305: 1, L0748: 1 and L0749: 1.		
HCWEH95	795046	9122	151 - 276	18874		Arg-1 to Trp-6, Cys-13 to Arg-19.	H0305: 1 and L0748: 1.		
HCWDO74	576471	9123	3 - 206	18875			H0305: 1		
HCWDO26	576470	9124	40 - 147	18876			H0305: 1		
HCWDJ81	514607	9125	278 - 144	18877			H0305: 1		
	588502	9748	11 - 343	19500					
	623460	9749	99 - 326	19501		Pro-35 to Thr-40, Trp-51 to Ser-58.			
HCWCR40	711507	9126	176 - 316	18878		Phe-3 to Lys-8, Ser-15 to Val-22.	L0766: 2, H0305: 1 and L0745: 1.		
HCWCN11	849959	9127	717 - 896	18879			L0766: 2, L0748: 2 and		

HCWCM08	849958	9128	122 - 340	18880			H0305: 1.		
HCWCL46	719244	9129	240 - 410	18881	Gly-11 to Lys-16.		H0305: 1		
HCWCJ16	411336	9130	175 - 465	18882	Thr-72 to Tyr-79.		H0305: 1, L0774: 1 and L0465: 1.		
	514257	9750	549 - 355	19502	Ser-1 to Gly-10.		H0305: 1		
HCWCI85	840121	9131	210 - 389	18883			H0305: 1		
HCWCH85	753191	9132	102 - 257	18884	Ser-1 to Arg-9, Leu-13 to Gly-25, Pro-31 to Ile-36.		H0305: 1 and L0766: 1.		
HCWCH11	967666	9133	172 - 291	18885	Tyr-3 to Ser-10.		H0305: 1, L0109: 1, L0749: 1, L0779: 1 and L0599: 1.		
HCWBM07	954100	9134	108 - 467	18886	Tyr-17 to Ala-33, Pro-58 to Asp-63, Arg-89 to Asp-94, Ala-97 to Pro-104.		L0748: 11 and H0305: 1.		
HCWAN45	728385	9135	236 - 60	18887	Arg-42 to Asp-59.		H0305: 1		
	889047	9751	11 - 223	19503					
HCWAI53	586997	9136	67 - 300	18888	Val-4 to Lys-13.		H0305: 1		
HCWAB85	783392	9137	180 - 311	18889	Pro-1 to Val-7.		H0305: 1		
HCWAB72	766288	9138	56 - 211	18890			H0305: 1		
HCWAB49	529659	9139	2 - 64	18891	Thr-3 to His-12.		H0305: 1		
HCWAB37	575491	9140	56 - 190	18892	Ala-18 to Trp-31, Thr-33 to Ser-38.		H0305: 1		
HCWAB36	529660	9141	98 - 244	18893	Tyr-1 to Asp-17, Trp-37 to Cys-44.		H0305: 1		
HCWAB35	416968	9142	1 - 201	18894	Ser-12 to Ser-17.		H0305: 1		
HCWAB25	575270	9143	21 - 137	18895	Arg-6 to Leu-13.		H0305: 1		
HCWAB23	529664	9144	2 - 241	18896	His-45 to Gln-53, Pro-56 to Thr-74.		H0305: 1 and L0789: 1.		
HCVAC86	785784	9145	27 - 227	18897	Leu-7 to Leu-13.		H0300: 1		
HCVAC80	529688	9146	143 - 316	18898			H0300: 1		
HCVAC73	529687	9147	2 - 226	18899	Pro-53 to Trp-62.		H0300: 1		
HCVAC72	529693	9148	39 - 260	18900			H0300: 1		



HCVAC70	507284	9149	115 - 354	18901	Gly-9 to Ser-17, Thr-51 to Thr-57.	H0300: 1 and L0604: 1.		
HCVAC58	575510	9150	2 - 202	18902	Ser-16 to Ala-22, Lys-61 to Glu-67.	H0300: 1		
HCVAC47	861969	9151	168 - 326	18903		H0300: 1	12	
HCVAC45	529691	9152	2 - 289	18904	Ala-1 to Trp-8, Glu-22 to Leu-28, Leu-32 to Pro-55, Arg-64 to Asp-69, Glu-73 to Leu-79.	H0300: 1	17p13	138190, 254210, 271900, 600179, 600977, 601202, 601777
HCVAC38	529692	9153	209 - 319	18905		H0300: 1		
HCVAC33	529694	9154	191 - 331	18906		H0300: 1		
HCVAC26	529698	9155	69 - 290	18907	Pro-15 to Arg-20.	H0300: 1		
HCVAC21	529695	9156	55 - 222	18908	Met-1 to Ser-6.	H0300: 1		
HCVAC19	879694	9157	3 - 197	18909		H0300: 1		
HCUJO6	934889	9158	229 - 372	18910	Ser-24 to Asp-37.	H0402: 1		
HCUIM28	849998	9159	2 - 409	18911	Pro-16 to Thr-29, Pro-45 to Ala-53, Pro-72 to Trp-77, Pro-101 to Ser-107.	H0402: 1 and L0759: 1.		
HCUJK74	765645	9160	50 - 292	18912		L0750: 2 and H0402: 1.		
HCUHY13	657297	9161	120 - 386	18913		H0402: 1 and L0361: 1.		
HCUHY10	964727	9162	60 - 224	18914		H0402: 1 and L0748: 1.		
HCUHU61	850008	9163	183 - 395	18915	Glu-8 to Arg-15.	H0402: 1 and L0717: 1.		
HCUHU54	730739	9164	200 - 367	18916		H0402: 1 and L0754: 1.		
HCUHT92	792756	9165	3 - 206	18917	Asn-20 to Cys-25, Asn-30 to Ala-38.	H0402: 1 and L0748: 1.		
HCUHT74	765641	9166	113 - 256	18918	Asp-1 to Glu-8.	H0402: 1		
HCUHT37	575794	9167	87 - 200	18919	Asn-8 to Thr-31, Leu-33 to Trp-38.	H0402: 1		
HCUHT26	681874	9168	2 - 118	18920		H0402: 1		
HCUHT13	657295	9169	17 - 217	18921	Asn-11 to Lys-16.	H0402: 1		
HCUHT03	924494	9170	130 - 282	18922	Glu-37 to Gly-44.	L0748: 2 and H0402: 1.		
HCUHS21	670988	9171	247 - 423	18923		H0402: 1 and L0748: 1.		
HCUHO27	690027	9172	28 - 177	18924		L0731: 3, L0768: 2, H0402:		

HCUHO13	879921	9173	515 - 276	18925			1, L0659: 1 and L0759: 1.		
HCUHK11	967142	9174	180 - 410	18926			H0402: 1		
HCUHH95	941943	9175	1411 - 1061	18927		Phe-86 to Arg-99, Arg-105 to Phe-111.	H0402: 1, L0717: 1 and L0612: 1.		
HCUHH04	927500	9176	3 - 566	18928		Gln-53 to Gln-63.	H0402: 1		
HCUHG67	751673	9177	563 - 760	18929			L0777: 2 and H0402: 1.		
HCUGT86	784694	9178	133 - 312	18930		Leu-1 to Trp-7.	H0402: 1 and L0468: 1.		
HCUGS67	751669	9179	328 - 450	18931		Pro-28 to Lys-41.	H0402: 1 and L0596: 1.		
HCUGO07	953412	9180	122 - 262	18932		Val-23 to Arg-28.	H0402: 1 and L0518: 1.		
HCUGN19	716989	9181	35 - 382	18933		Glu-58 to Gly-64, Pro-77 to Cys-93, Pro-96 to Pro-106.	AR089: 7, AR061: 2 L0744: 3, L0766: 2, H0402: 1 and L0754: 1.		
HCUGM93	792329	9182	5 - 262	18934		Arg-1 to Ser-12.	H0402: 1 and L0748: 1.		
HCUGM64	745853	9183	193 - 330	18935			H0402: 1 and L0747: 1.		
HCUGL20	668913	9184	112 - 303	18936			H0402: 1 and L0748: 1.		
HCUGL01	916550	9185	1 - 162	18937			L0785: 1 and H0402: 1.		
HCUGK86	785517	9186	164 - 301	18938			H0402: 1		
HCUGK85	783521	9187	3 - 329	18939		Gln-19 to Phe-25, Ser-35 to Pro-44.	H0402: 1		
HCUGK78	773601	9188	69 - 227	18940		Leu-7 to Leu-15.	H0402: 1		
HCUGK64	746604	9189	3 - 137	18941		Lys-19 to Val-26.	H0402: 1		
HCUGK54	730709	9190	3 - 116	18942		His-1 to Lys-6, Leu-30 to Gln-38.	H0402: 1		
HCUGK51	725013	9191	2 - 178	18943		Phe-12 to Phe-23.	H0402: 1		
HCUGK38	706479	9192	19 - 174	18944		Leu-7 to Leu-13, Ser-30 to Ser-40.	H0402: 1		
HCUGK25	678130	9193	1 - 165	18945		Thr-2 to Ala-8.	H0402: 1		
HCUGK18	666454	9194	110 - 259	18946		Thr-25 to Gln-30.	H0402: 1		
HCUGK17	424102	9195	34 - 204	18947		Ser-21 to His-27.	H0402: 1		
HCUGK14	657539	9196	2 - 265	18948		Val-3 to Gly-23.	H0402: 1 and L0662: 1.		
HCUGK05	932078	9197	3 - 125	18949			H0402: 1		
HCUGI64	746608	9198	2 - 283	18950		Ala-1 to Cys-8.	H0402: 1		
HCUGH79	775206	9199	178 - 279	18951		Leu-10 to Lys-15,	H0402: 1		

HCUGH64	746600	9200	35 - 133	18952	Leu-19 to Lys-24. Met-1 to Trp-7, Arg-20 to Gln-33.	H0402: 1		
HCUGH52	726052	9201	67 - 183	18953		H0402: 1		
HCUGH44	716624	9202	1 - 60	18954		H0402: 1		
HCUGH42	713782	9203	89 - 274	18955	Lys-1 to Lys-6.	H0402: 1		
HCUGD30	850041	9204	178 - 432	18956	Glu-7 to Gln-14.	L0777: 2, L0599: 2, H0402: 1 and L0369: 1.		
HCUGC25	464029	9205	27 - 287	18957	Gly-67 to Glu-73, Val-82 to Tyr-87.	H0402: 1 and L0740: 1.		
HCUGB93	850043	9206	2 - 187	18958	Tyr-40 to Gln-45.	H0402: 1		
HCUGB58	736092	9207	30 - 113	18959	Lys-19 to Pro-28.	H0402: 1		
HCUGB37	706468	9208	56 - 208	18960	Leu-26 to Arg-31, Gly-38 to Lys-51.	H0402: 1		
HCUGB22	575851	9209	3 - 134	18961		H0402: 1		
HCUGB20	669742	9210	113 - 226	18962		H0402: 1		
HCUGB14	854035	9211	185 - 373	18963	Glu-27 to Ser-39.	H0402: 1		
HCUFY79	494008	9212	511 - 245	18964		H0402: 1		
	882298	9752	287 - 571	19504	Lys-12 to Glu-25, Gly-64 to Asp-79.			
HCUFW11	850054	9213	222 - 401	18965	Gln-1 to Trp-6, Met-21 to Ser-30, Pro-54 to Ala-60.	H0402: 1 and L0748: 1.		
HCUFW09	625658	9214	1 - 186	18966	Lys-1 to Pro-6, Ser-8 to Thr-15.	H0402: 1 and L0599: 1.		
HCUFT37	706467	9215	239 - 370	18967		H0402: 1, L0021: 1, L0065: 1, L0770: 1, L0769: 1, L0803: 1, L0804: 1, L0791: 1, L0665: 1 and L0747: 1.		
HCUFQ08	959567	9216	1 - 342	18968	Leu-21 to Asn-27.	H0402: 1 and L0369: 1.		
HCUFP11	967155	9217	2 - 220	18969	Lys-1 to His-6, Pro-20 to Ala-25, Pro-35 to Val-40, Leu-53 to Ser-61.	H0402: 1 and L0749: 1.		
HCUFO96	796434	9218	2 - 136	18970		H0402: 1		
HCUFO93	792376	9219	64 - 210	18971	Ser-1 to His-12,	H0402: 1		

HCUF068	753083	9220			Pro-15 to Ser-29.				
HCUF043	715337	9221	3 - 122	18972	Pro-6 to Thr-18.			H0402: 1	
HCUF036	575850	9222	61 - 225	18973	Gly-15 to Cys-33, Glu-40 to Lys-52.			H0402: 1	
HCUF024	677273	9223	79 - 366	18974	Thr-1 to Gly-9, Pro-68 to Glu-79, Pro-91 to Arg-96.			H0402: 1	
HCUF011	967156	9224	70 - 327	18975				H0402: 1	109690, 109690, 131400, 154500, 159000, 180071, 181460, 222600, 222600, 222600, 272750, 600807, 601596, 602089
HCUFN78	773620	9225	2 - 160	18976	Glu-33 to Thr-44.			H0402: 1 and L0682: 1.	
HCUFM35	706461	9226	1 - 168	18977				H0402: 1 and L0754: 1.	
HCUFL40	711242	9227	253 - 414	18978				H0402: 1, L0766: 1, L0647: 1, L0749: 1 and L0605: 1.	
HCUFK35	706460	9228	96 - 326	18979	Ala-1 to Ser-8.			L0604: 2 and H0402: 1.	
HCUFK09	961145	9229	161 - 457	18980	Ser-18 to Ala-24, Gly-32 to Asp-41, Arg-52 to Ile-57.			L0605: 2, H0402: 1, L0777: 1 and L0604: 1.	
HCUFJ08	850074	9230		18981				H0402: 1 and L0365: 1.	
HCUFJ50	974472	9231	1 - 333	18982	Leu-1 to Gly-7.			H0402: 1 and L0601: 1.	
HCUFF74	765662	9232	51 - 215	18983				H0402: 1	
HCUFES5	731843	9233	90 - 425	18984				H0402: 1 and L0596: 1.	
HCUFES4	730745	9234	11 - 112	18985	His-5 to Ser-10.			H0402: 1 and L0750: 1.	
HCUF70	757280	9235	48 - 152	18986	Pro-2 to Tyr-7, Pro-30 to Cys-36.			H0402: 1 and L0751: 1.	
HCUES01	916805	9236	145 - 312	18987	Pro-6 to Ser-12, Asp-19 to Ile-25.			L0748: 2 and H0402: 1.	
HCUEQ12	922556	9237	346 - 534	18988				L0369: 2 and H0402: 1.	
HCUEP32	586999	9238	163 - 384	18989				H0402: 1 and L0731: 1.	165215, 222900, 600049
			368 - 138						
			127 - 273	18990	Leu-7 to Gly-17, Leu-23 to Cys-28,			H0402: 1	

HCUE074	576576	9239	2 - 223	18991	Glu-35 to Lys-46. Val-24 to Gly-35, Pro-46 to Cys-51, Thr-57 to Lys-74.	H0402: 1		
HCUE020	669764	9240	267 - 464	18992	Lys-6 to Leu-16.	H0402: 1 and L0600: 1.		
HCUEM93	792424	9241	52 - 240	18993	Gly-1 to Cys-6.	L0748: 2 and H0402: 1.		
HCUEM15	660450	9242	236 - 370	18994	Glu-32 to Gly-38.	H0402: 1 and L0362: 1.		
HCUEL24	677300	9243	171 - 341	18995		L0439: 2 and H0402: 1.		
HCUEL07	953587	9244	211 - 462	18996	Glu-12 to Asp-21, Pro-33 to Ser-53, Leu-60 to Thr-69.	L0599: 2, H0402: 1 and L0769: 1.		
HCUEG27	683541	9245	314 - 544	18997		H0402: 1 and L0748: 1.		
HCUEF38	706450	9246	1 - 171	18998	Leu-16 to Asp-21.	H0402: 1		
HCUED05	932123	9247	3 - 194	18999	Ser-15 to Cys-31.	H0402: 1		
HCUDY74	839955	9248	133 - 321	19000	Ala-42 to Glu-49.	H0402: 1 and L0520: 1.		
HCUDX89	974483	9249	3 - 227	19001	Asp-11 to Arg-17, Arg-32 to Pro-44, Leu-53 to His-58, Gln-68 to Cys-75.	H0402: 1		
HCUDU18	850099	9250	1 - 261	19002	Arg-33 to Thr-39.	H0402: 1 and L0589: 1.		
HCUDQ81	902510	9251	144 - 329	19003	Lys-1 to Ile-8, Leu-24 to Gly-29, Glu-52 to Lys-62.	H0402: 1		
	928439	9753	440 - 3	19505	Lys-1 to Ile-8, Leu-24 to Gly-29, Glu-52 to Ser-64, Asn-88 to Asn-97, Gln-104 to Glu-109.			
HCUDQ45	881366	9252	295 - 591	19004	Pro-43 to Trp-48, Ser-81 to Ser-90.	H0402: 1		
HCUDN89	811185	9253	2 - 328	19005		H0402: 1 and L0756: 1.		
HCUDN82	779978	9254	185 - 310	19006		H0402: 1 and L0599: 1.		
HCUDN71	862116	9255	2 - 394	19007		H0402: 1 and L0766: 1.		
HCUDK08	959679	9256	188 - 316	19008		H0402: 1 and L0803: 1.		
HCUDI17	664109	9257	57 - 227	19009	Leu-18 to Ser-25.	H0402: 1		
HCUDG26	681985	9258	226 - 369	19010		H0402: 1 and L0591: 1.		

HCUD07	953588	9259	2 - 235	19011			H0402: 1		
HCUC58	850117	9260	1 - 165	19012			H0306: 1 and L0750: 1.		
HCUC14	659221	9261	189 - 353	19013		Trp-1 to Ser-9.	H0306: 1, L0748: 1 and L0749: 1.		
HCUC123	676276	9262	119 - 208	19014			H0306: 1 and L0745: 1.		
HCUC29	608615	9263	2 - 343	19015		Ser-25 to Ser-30.	AR051: 9, AR050: 3, AR054: 2		
	637567	9754	2 - 337	19506		Ser-23 to Ser-28, Cys-79 to His-84.	H0306: 1		
HCUCG40	800153	9264	1 - 153	19016			AR054: 24, AR051: 19, AR050: 12		
							H0306: 1		
HCUCG07	953823	9265	73 - 300	19017		Lys-19 to Lys-25.	H0306: 1 and L0387: 1.		
HCUCD83	781346	9266	115 - 381	19018			H0306: 1 and L0755: 1.		
HCUCD05	932333	9267	116 - 376	19019			L0588: 2, H0306: 1 and L0747: 1.		
HCUBX45	850122	9268	125 - 400	19020		Ser-1 to Gly-7.	H0306: 1, L0800: 1, L0809: 1 and L0779: 1.		
HCUBV91	790368	9269	47 - 223	19021			H0306: 1 and L0596: 1.		
HCUBT35	850126	9270	121 - 291	19022		Glu-50 to Ala-57.	H0306: 1 and L0748: 1.		
HCUBS07	953861	9271	85 - 243	19023		Asp-13 to Trp-18, Leu-39 to Gly-46.	H0306: 1 and L0749: 1.		
HCUBP94	574198	9272	3 - 143	19024		Cys-11 to Gln-20.	H0306: 1		
HCUBP82	526773	9273	1 - 69	19025			H0306: 1		
HCUBP48	577289	9274	1 - 222	19026		Asn-12 to His-19, Lys-61 to Thr-72.	H0306: 1 and L0748: 1.		
HCUBP34	576462	9275	177 - 383	19027			H0306: 1		
HCUBP10	961259	9276	3 - 203	19028		Lys-1 to Thr-7, Thr-17 to Gln-25, Leu-29 to Arg-44.	H0306: 1		
HCUBO67	526489	9277	128 - 232	19029		Pro-15 to Cys-28.	H0306: 1		
HCUBM73	577294	9278	1 - 201	19030		Pro-1 to Cys-16.	H0306: 1 and L0748: 1.		
HCUBM49	722190	9279	163 - 438	19031		Gly-84 to Thr-90.	L0749: 2, H0306: 1 and L0748: 1.		
HCUBL10	968223	9280	222 - 410	19032			H0306: 1 and L0761: 1.		

HCUBJ45	723364	9281	194 - 367	19033	Lys-12 to Gly-21.	L0748: 2 and H0306: 1.	
HCUBG69	757752	9282	2 - 238	19034		H0306: 1	
HCUBG43	576468	9283	202 - 381	19035		H0306: 1	
HCUBE89	785987	9284	2 - 169	19036	Glu-1 to Lys-13, Gly-34 to His-39.	L0777: 2 and H0306: 1.	
HCUBE49	723175	9285	47 - 193	19037	Ser-3 to Gly-10, Leu-13 to His-20.	H0306: 1 and L0599: 1.	
HCUBE22	409828	9286	338 - 499	19038		H0306: 1	
HCUBB68	752247	9287	174 - 380	19039		H0306: 1 and L0748: 1.	
HCUBA93	792515	9288	297 - 440	19040		H0306: 1 and L0591: 1.	
HCUAZ01	917266	9289	176 - 298	19041	Pro-19 to Arg-34.	H0306: 1 and L0634: 1.	
HCUAW03	924897	9290	193 - 426	19042	Thr-20 to Asp-25, His-42 to Ser-58, Asn-68 to Leu-73.	H0306: 1 and L0776: 1.	
HCUAF34	706426	9291	8 - 97	19043		H0306: 1 and L0748: 1.	
HCUAN95	796010	9292	2 - 100	19044		H0306: 1	
HCUAN89	574275	9293	49 - 141	19045	Ser-21 to Lys-31.	H0306: 1	
HCUAN53	728364	9294	2 - 133	19046		H0306: 1	
HCUAM65	887470	9295	225 - 464	19047		AR050: 38, AR054: 30, AR051: 29 H0306: 1	
HCUAL33	702677	9296	8 - 181	19048		L0749: 2, H0306: 1 and L0748: 1.	
HCUAG10	968229	9297	1 - 168	19049		H0306: 1 and L0601: 1.	
HCUAF80	862171	9298	3 - 140	19050	Ile-26 to Lys-31, Pro-39 to Pro-44.	L0772: 2 and H0306: 1.	
HCUAF01	850153	9299	53 - 313	19051	Pro-10 to Ser-16.	H0306: 1	
HCUAA92	792947	9300	429 - 593	19052		H0306: 1, L0766: 1, L0745: 1 and L0752: 1.	
HCFOBP90	862572	9301	438 - 638	19053	Arg-19 to Arg-25.	L0385: 1 and H0423: 1.	
HCFOO25	678200	9302	115 - 246	19054		L0777: 1 and H0423: 1.	
HCFOO01	916687	9303	230 - 412	19055		L0717: 1 and H0423: 1.	
HCFOF45	850372	9304	145 - 474	19056	Ser-37 to Ser-42.	AR050: 16, AR054: 7, AR051: 4 H0423: 1	

HCFOF34	955905	9305	79 - 249	19057	Ile-1 to Leu-6.	L0375: 1, L0542: 1, L0526: 1, L0749: 1, L0759: 1 and H0423: 1.		
HCFNQ62	745755	9306	2 - 151	19058		L0598: 2, UNKWN: 1, L0748: 1, L0749: 1 and H0423: 1.		
HCFNP09	961149	9307	145 - 393	19059	Ala-15 to Leu-27, Ser-42 to Glu-47.	L0804: 2, L0731: 2, L0747: 1 and H0423: 1.		
HCFNJ34	485822	9308	2 - 325	19060		H0423: 1		
	494112	9755	314 - 135	19507	Arg-25 to Gly-36, Pro-55 to Tyr-60.			
HCFNG63	745148	9309	45 - 245	19061	Thr-54 to Pro-67.	H0423: 1		
HCFNG10	848225	9310	140 - 1036	19062	Pro-4 to Phe-9, Glu-17 to Pro-24, Lys-51 to Ala-104, Lys-114 to Lys-140, Arg-153 to Gln-188, Glu-203 to Gly-234, Gln-247 to Thr-262.	L0766: 1 and H0423: 1.		
HCFNB09	625697	9311	39 - 137	19063		L0748: 1 and H0423: 1.		
HCFNA77	874777	9312	2 - 163	19064	Thr-37 to Cys-43.	L0758: 1 and H0423: 1.		
HCFNA64	850391	9313	171 - 464	19065	Lys-13 to Gln-19, Ser-26 to Cys-40.	L0777: 1 and H0423: 1.		
HCFNA21	671021	9314	115 - 258	19066	Leu-7 to Leu-13, Pro-15 to Cys-28, Arg-41 to Lys-46.	H0423: 1		
HCFMZ90	922112	9315	273 - 881	19067	Asp-1 to Arg-8, Lys-15 to Asn-20, Thr-74 to Leu-80, Pro-84 to Asp-90.	AR061: 2, AR089: 1, L0749: 1, L0731: 1, L0757: 1 and H0423: 1.		
HCFMW71	920506	9316	195 - 407	19068	Pro-7 to Thr-12.	AR089: 10, AR061: 3, L0748: 3, L0749: 3, L0005: 1, L0777: 1, L0361: 1 and H0423: 1.		
HCFMU01	916695	9317	51 - 263	19069	Arg-37 to His-52.	L0766: 2 and H0423: 1.		
HCFMP46	463278	9318	54 - 245	19070	Asp-56 to Tyr-63.	L0756: 2, L0777: 2, L0749: 1.		



HCFLM047	881505	9319	125 - 322	19071	Pro-14 to Thr-23, Leu-42 to Ser-51.	1 and H0423: 1. H0423: 1	20q11.2	139190, 139190, 224100, 601002, 601002, 601146, 601146, 601146
HCFLM02	920349	9320	278 - 607	19072	Phe-18 to Gly-23, Met-79 to Asp-89.	L0809: 1 and H0423: 1.		
HCFLM37	955281	9321	137 - 658	19073	Pro-58 to Cys-69, Pro-71 to Glu-77, Tyr-102 to Ser-107.	AR089: 5, AR061: 1 H0423: 1		
HCFLM46	719113	9322	109 - 321	19074		L0654: 1 and H0423: 1.		
HCFLY85	909182	9323	96 - 242	19075	Arg-16 to Arg-21, Tyr-37 to Leu-48.	L0766: 2, L0747: 2 and H0423: 1.		
HCFLY53	727465	9324	71 - 265	19076		L0748: 3 and H0423: 1.		
HCFLY08	959620	9325	238 - 495	19077		L0599: 2, L0763: 1, L0805: 1, L0754: 1 and H0423: 1.		
HCFLV30	692781	9326	253 - 462	19078	Glu-9 to Ala-14, Gln-24 to Gln-31, Arg-41 to Pro-48.	L0748: 3 and H0423: 1.		
HCFLT86	785560	9327	246 - 560	19079	Tyr-49 to Ala-55.	L0749: 1 and H0423: 1.		
HCFLM03	850403	9328	219 - 395	19080	Asn-12 to Tyr-23.	L0581: 1 and H0423: 1.		
HCFLM03	850406	9329	351 - 698	19081	Pro-39 to Gly-47, Asn-55 to Ser-64, Ser-76 to Gln-83.	L0527: 2, L0366: 1 and H0423: 1.		
HCFLK10	964792	9330	230 - 460	19082		L0745: 1, L0750: 1 and H0423: 1.		
HCFLB24	502414	9331	3 - 248	19083	Ser-43 to Ala-49, Gln-76 to Met-82.	H0423: 1		
HCFLB24	511210	9756	433 - 251	19508	Pro-25 to Ser-33.			
HCFLD43	779327	9332	3 - 173	19084	Glu-38 to Gly-43.	L0586: 1, L0756: 1 and H0422: 1.	12q14	123829, 147570, 181430, 252940, 264700, 600808, 601284, 601769, 601769, 602116
HCFCV32	850413	9333	168 - 377	19085	Asp-22 to Gln-27, Pro-29 to Gly-36.	H0422: 1		

HCFCP77	772256	9334	87 - 194	19086			L0754: 1 and H0422: 1.		
HCFCM75	850435	9335	182 - 355	19087	Glu-1 to Lys-15.		L0740: 1 and H0422: 1.		
HCFCK25	494159	9336	239 - 3	19088	Lys-50 to Lys-64.		L0517: 1 and H0422: 1.		
	519091	9757	212 - 376	19509	Pro-38 to Leu-43, Ile-49 to Cys-55.				
HCFCG23	850426	9337	44 - 247	19089	Lys-46 to Lys-57.		H0422: 1		
HCFCF76	973808	9338	1 - 291	19090			H0422: 1		
HCFCC10	964782	9339	277 - 507	19091	Arg-58 to Glu-66.		L0794: 2 and H0422: 1.		
HCFBX86	844884	9340	425 - 619	19092	Arg-23 to Thr-28.		H0422: 1		
	874103	9758	273 - 485	19510					
HCFBQ30	692787	9341	505 - 338	19093			L0748: 1, L0754: 1, L0745: 1 and H0422: 1.		
HCFBM75	766599	9342	137 - 316	19094			L0748: 1 and H0422: 1.		
HCFBM41	711631	9343	589 - 774	19095	Pro-31 to Lys-38.		L0748: 1 and H0422: 1.		
HCFBK28	706243	9344	4 - 171	19096			L0754: 1 and H0422: 1.		
HCFBK04	925601	9345	182 - 304	19097	Glu-1 to Trp-7, Gly-35 to His-41.		L0803: 3, L0777: 3, L0756: 2, L0780: 2, L0766: 1, L0774: 1, L0743: 1, L0757: 1, L0596: 1 and H0422: 1.		
							H0422: 1		
HCFBI51	670066	9346	27 - 518	19098			L0794: 1, L0805: 1, L0439: 1, L0747: 1, L0779: 1, L0758: 1 and H0422: 1.		
HCFBA94	698647	9347	139 - 291	19099			AR051: 13, AR054: 2, AR050: 1 H0422: 1		
HCFAZ12	970609	9348	3 - 188	19100	Asp-15 to Ser-22.		L0588: 1 and H0422: 1.		
HCFAZ07	849823	9349	222 - 1	19101	Ser-28 to Asn-40, Lys-68 to Lys-74.				
HCFAF08	959714	9350	117 - 275	19102	Leu-1 to Ala-7.		L0438: 2 and H0422: 1.		
HCFAC38	576723	9351	2 - 166	19103	Arg-1 to Lys-7, Arg-28 to Arg-34.		H0422: 1		
HBVAB02	971578	9352	324 - 139	19104			S3016: 1, L0598: 1, L0763: 1 and L0665: 1.		
HBVAG44	716685	9353	3 - 110	19105	His-1 to Ser-6, Ser-21 to Val-28.		S0182: 1 and L0766: 1.		
HBVAC23	847698	9354	3 - 194	19106			S0182: 1 and L0748: 1.		

HBTA84	781946	9355	2 - 295	19107	Thr-41 to Phe-51, Leu-58 to Asn-63.	AR089: 1, AR061: 0 S0180: 1		
HBMXU73	953898	9356	507 - 635	19108	Tyr-7 to Thr-21.	L0770: 2, S0116: 1, L0775: 1 and L0439: 1.		
HBMXS23	675254	9357	216 - 455	19109	Gln-1 to Pro-7, Gln-43 to Ser-53, Lys-67 to Lys-74.	L0748: 4, L0605: 3, S0116: 1 and L0747: 1.		
HBMXL78	738763	9358	312 - 452	19110		S0116: 1 and L0731: 1.		
HBMXL41	711608	9359	2 - 118	19111		S0116: 1 and L0748: 1.		
HBMXJ70	757328	9360	291 - 398	19112		S0116: 1 and L0748: 1.		
HBMXG10	968055	9361	16 - 198	19113	Glu-15 to Trp-22, Cys-24 to Tyr-31, Ser-52 to Arg-57.	S0116: 1 and L0439: 1.		
HBMXF73	764551	9362	134 - 295	19114	Ser-37 to Met-44.	S0116: 1 and L0748: 1.		
HBMWX13	955208	9363	153 - 317	19115	Pro-5 to Pro-11.	S0116: 1 and L0665: 1.		
HBMWS75	767440	9364	108 - 350	19116	Met-1 to Gly-6, Lys-19 to Val-26.	S0116: 1 and L0748: 1.		
HBMWR62	754059	9365	177 - 395	19117		S0116: 1, L0754: 1 and L0589: 1.		
HBMWK06	936088	9366	142 - 249	19118	Lys-8 to Cys-13.	S0116: 1 and L0608: 1.		
HBMWI28	685443	9367	3 - 134	19119	Gly-7 to Arg-13.	L0748: 2 and S0116: 1.		
HBMWE35	706034	9368	184 - 360	19120	Ser-1 to Ser-10, Pro-39 to His-45.	L0745: 2 and S0116: 1.	15q22	102578, 109700, 151670, 154550, 601780
HBMVQ26	546495	9369	175 - 303	19121	Ala-8 to Glu-20.	S0116: 1		
HBMVO41	712565	9370	225 - 359	19122		S0116: 1 and L0439: 1.		
HBMVI33	702683	9371	75 - 242	19123		S0116: 1 and L0439: 1.		
HBMVG85	575418	9372	54 - 221	19124		L0439: 2 and S0116: 1.		
HBMVG18	666855	9373	37 - 159	19125		L0748: 4 and S0116: 1.		
HBMVE59	933208	9374	50 - 178	19126	Asn-4 to Ser-10.	L0748: 3 and S0116: 1.		
HBMVD05	932441	9375	175 - 357	19127	Met-21 to Lys-27, Asp-35 to Thr-40, Gln-42 to Tyr-47.	S0116: 1 and L0581: 1.		
HBMUW96	574517	9376	28 - 210	19128		S0116: 1		
HBMUW85	783416	9377	257 - 625	19129	Pro-11 to Gly-24.	S0116: 1, L0439: 1 and L0731: 1.		

HBMUW58	574513	9378	86 - 214	19130			S0116: 1		
HBMUN03	847787	9379	244 - 408	19131			S0116: 1 and L0758: 1.		
HBMUL31	456760	9380	249 - 503	19132	Ser-22 to Gln-34.		S0116: 1		
HBMUG59	739509	9381	55 - 249	19133	Arg-10 to Thr-16.		S0116: 1 and L0758: 1.		
HBMUG23	425961	9382	464 - 619	19134			S0116: 1 and L0766: 1.		
	675305	9759	155 - 337	19511					
	675308	9760	287 - 189	19512	Gln-16 to Lys-33.				
HBMUD91	789320	9383	262 - 603	19135	Asp-43 to His-71.		S0116: 1 and L0748: 1.		
HBMUB13	950984	9384	177 - 416	19136			S0116: 1 and L0740: 1.		
HBMTX71	760605	9385	122 - 331	19137	Ile-1 to Leu-7, Lys-33 to Ser-38, Gln-52 to Gly-66.		S0116: 1 and L0748: 1.		
					Thr-34 to Asp-39, Pro-75 to Ser-82.				
HBMTS23	676310	9386	44 - 298	19138			S0116: 1, L0438: 1 and L0439: 1.		
HBMTR29	847785	9387	207 - 497	19139			L0599: 2, S0116: 1, L0763: 1 and L0748: 1.		
HBMTM67	751907	9388	162 - 308	19140			S0116: 1 and L0754: 1.		
HBMTD69	754179	9389	199 - 324	19141			S0116: 1 and L0754: 1.		
HBMTB85	923730	9390	192 - 446	19142			S0116: 1 and L0750: 1.		
HBMTB34	706024	9391	178 - 474	19143	Leu-11 to Asn-19, Arg-39 to Trp-44, Gly-49 to Ala-55.		L0749: 2 and S0116: 1.		
HBMSX83	863883	9392	1 - 162	19144	Arg-1 to Ser-8.		S0116: 1 and L0766: 1.		
HBMDS02	920096	9393	219 - 380	19145	Tyr-12 to Tyr-17.		H0421: 1 and L0777: 1.		
HBMDN16	661947	9394	265 - 495	19146			H0421: 1 and L0439: 1.		
HBMDM25	678127	9395	380 - 571	19147	Asn-14 to Ile-20, Cys-30 to Tyr-36.		H0421: 1, L0766: 1 and L0439: 1.		
HBMDL27	683427	9396	280 - 501	19148	Cys-6 to Arg-26, Ser-28 to Arg-38, Phe-63 to Tyr-74.		H0421: 1 and L0748: 1.		
HBMDL52	727169	9397	365 - 547	19149	Lys-18 to Gly-23.				
HBMDL72	879813	9398	67 - 387	19150	Pro-2 to Gln-10.		H0421: 1 and L0599: 1.		
HBMCZ30	692733	9399	324 - 530	19151	Arg-1 to Gly-11, Ala-15 to Ser-22, Gln-40 to Gly-45.		H0421: 1 H0421: 1 and L0602: 1.		

HBMCT24	677209	9400	133 - 285	19152			H0421: 1		
HBMCT09	625627	9401	456 - 626	19153	Phe-1 to Asn-11.		L0754: 2 and H0421: 1.		
HBMCS92	792736	9402	2 - 181	19154	Ala-1 to Lys-12.		H0421: 1 and L0748: 1.		
HBMCS55	731802	9403	76 - 219	19155			L0746: 2, H0421: 1 and L0777: 1.		
HBMCR25	678164	9404	275 - 613	19156			L0766: 3, H0421: 1 and L0741: 1.		
HBMQC95	888393	9405	181 - 372	19157			AR050: 133, AR054: 121, AR051: 115 H0421: 1		
HBMCG84	783043	9406	3 - 170	19158	Gln-21 to Val-26, Lys-42 to Ile-47.		H0421: 1 and L0748: 1.		
HBMCF20	646279	9407	106 - 495	19159			H0421: 1, L0384: 1 and L0592: 1.		
HBMCB55	731800	9408	1 - 228	19160	Pro-13 to Arg-21.		H0421: 1 and L0748: 1.		
HBMXB72	911168	9409	438 - 719	19161	Trp-10 to Ala-18, Arg-86 to Pro-93.		H0421: 1		
HBMXB64	746633	9410	91 - 249	19162			L0754: 2 and H0421: 1.		
HBMXB55	668981	9411	199 - 327	19163	Gln-19 to Ala-31.		H0421: 1, L0748: 1, L0439: 1 and L0596: 1.		
HBMBU52	973805	9412	97 - 282	19164			H0421: 1 and L0794: 1.		
HBMBN85	783520	9413	18 - 212	19165	Arg-25 to Cys-32.		H0421: 1		
HBMBI49	723094	9414	316 - 456	19166	Thr-1 to Ser-9.		L0748: 2 and H0421: 1.		
HBMBF89	912789	9415	73 - 579	19167			H0421: 1, L0749: 1 and L0755: 1.		
HBMBF78	623421	9416	590 - 892	19168			H0421: 1		
HBMBE68	879588	9417	2 - 400	19169			H0421: 1 and L0776: 1.		
HBMBC66	859500	9418	87 - 353	19170	His-12 to Cys-21.		H0421: 1 and L0747: 1.		
HBMBS57	734915	9419	1 - 147	19171			H0421: 1		
HBMBS45	578817	9420	12 - 293	19172	Val-6 to Lys-18, Arg-31 to Arg-42, Arg-48 to Asn-55.		H0421: 1		
HBMACS4	930481	9421	191 - 433	19173			T0071: 1 and L0051: 1.		
HBJNC01	915970	9422	120 - 299	19174			H0318: 1 and L0766: 1.		
HBJNB52	726475	9423	160 - 357	19175	Pro-15 to Cys-23.		AR061: 4, AR089: 4		

									H0318: 1, L0766: 1 and L0748: 1.			
HBJMW95	797604	9424	497 - 802	19176				Thr-7 to Asp-21, Thr-42 to Ser-54.	L0758: 2 and H0318: 1.			
HBJMW03	921996	9425	149 - 310	19177				Ser-16 to Glu-22.	L0745: 2, H0318: 1, L0439: 1, L0746: 1 and L0779: 1.			
HBJMU53	727987	9426	88 - 285	19178				Arg-1 to Lys-6, Pro-17 to Phe-27.	H0318: 1 and L0439: 1.			
HBJMS40	710880	9427	101 - 235	19179					H0318: 1 and L0748: 1.			
HBJMR59	738615	9428	1 - 204	19180					H0318: 1 and L0748: 1.			
HBJML90	787320	9429	328 - 164	19181					H0318: 1, L0598: 1 and L0754: 1.			
HBJML80	775435	9430	165 - 305	19182				Ala-14 to Thr-19, Cys-29 to Trp-36.	H0318: 1 and L0750: 1.			
HBJME11	972939	9431	31 - 234	19183					H0318: 1			
HBJMC69	754875	9432	62 - 262	19184					H0318: 1 and L0748: 1.			
HBJMA80	777456	9433	42 - 215	19185					H0318: 1 and L0748: 1.			
HBJLX09	625319	9434	290 - 442	19186				Gln-4 to Lys-14.	H0318: 1 and L0605: 1.			
HBJLW74	765352	9435	88 - 354	19187				Ser-21 to Gly-27.	H0318: 1 and L0748: 1.			
HBJLU36	847851	9436	68 - 439	19188				Glu-19 to Ser-30.	H0318: 1 and L0748: 1.			
HBJLR37	849633	9437	2 - 328	19189				Asn-1 to His-11.	AR089: 3, AR061: 1 L0593: 2, L0594: 2, H0318: 1 and L0592: 1.			
HBJLR31	900883	9438	3 - 956	19190				His-7 to Gly-17, Gly-28 to Gln-33, Asp-51 to Ala-59, Glu-94 to Glu-101, Pro-118 to Val-123, Pro-143 to Gly-152, Gln-203 to Glu-211, Ser-213 to Thr-226, Ser-233 to Gln-239, Arg-274 to Ser-279, His-288 to Pro-294.	AR061: 4, AR089: 3, AR051: 2, AR050: 1, AR054: 1 H0318: 1			
HBJLF04	614915	9439	40 - 282	19191					H0318: 1 and L0591: 1.			
HBJLE70	847853	9440	586 - 834	19192				Asn-25 to Ser-34,	H0318: 1 and L0777: 1.			

HBJKI77	772000	9441	98 - 337	19193	Gly-50 to Ser-57.	L0747: 2 and H0318: 1.		
HBJKG07	952843	9442	530 - 802	19194	Pro-12 to Met-21.	H0318: 1 and L0800: 1.		
HBJKF02	919446	9443	246 - 398	19195	Glu-1 to Gly-8, Asp-32 to Glu-40.	H0318: 1 and L0766: 1.		
HBJKD77	771975	9444	179 - 379	19196		H0318: 1		
HBJKD64	746398	9445	3 - 143	19197	Ser-40 to Glu-47.	H0318: 1		
HBJKD60	740171	9446	666 - 902	19198		H0318: 1 and L0754: 1.		
HBJKD50	724159	9447	1 - 204	19199	Arg-1 to Tyr-6.	H0318: 1		
HBJKD49	847857	9448	3 - 215	19200		H0318: 1		
HBJKD40	710931	9449	36 - 179	19201		H0318: 1		
HBJKA77	771982	9450	2 - 178	19202		H0318: 1 and L0777: 1.	18p11.31-p11.2	202200
HBJKA01	916077	9451	19 - 153	19203	Lys-37 to Lys-45.	H0318: 1 and L0646: 1.		
HBJJX53	835733	9452	79 - 393	19204		AR061: 6, AR089: 4 H0318: 1		
HBJIT12	894345	9453	3 - 596	19205	Phe-12 to Gln-21, Asp-27 to Thr-38, Pro-44 to Ser-52, Asn-54 to Ser-74, Ser-86 to Thr-92, Ala-117 to Phe-124, Gly-137 to Thr-142, Gly-182 to Ser-187.	AR061: 2, AR089: 1 L0749: 2 and H0318: 1.		
HBJTN02	919371	9454	306 - 548	19206	Thr-1 to Gly-9, Glu-29 to Ala-36, Pro-43 to Asn-50.	L0239: 1 and H0318: 1.		
HBJIL10	937583	9455	3 - 119	19207	Val-23 to Asn-30.	H0318: 1 and L0766: 1.		
HBJJE44	716409	9456	195 - 374	19208	Phe-5 to Trp-19, His-45 to Lys-53.	L0439: 2, L0780: 2 and H0318: 1.		
HBJJA32	699059	9457	381 - 683	19209	Asp-39 to Asn-46, Ser-61 to Gln-66.	L0744: 3, H0318: 1 and L0743: 1.		
HBJJA01	916078	9458	543 - 1055	19210	Asn-66 to Tyr-71, Gly-102 to Phe-109, Lys-120 to Asn-126.	L0766: 5, L0777: 3, L0779: 2, L0731: 2, H0318: 1 and L0803: 1.		
HBJIL42	597100	9459	280 - 411	19211		H0318: 1 and L0754: 1.		
HBJIL36	861363	9460	2 - 370	19212	Leu-62 to Ser-68,	H0318: 1, L0780: 1 and		

HBJH60	930448	9461	1 - 234	19213	Gly-117 to Gln-123. Pro-35 to Pro-42.	L0759: 1. AR089: 35, AR061: 8 H0318: 1, L0520: 1 and L0779: 1.		
HBJH51	725081	9462	86 - 205	19214		H0318: 1 and L0748: 1.		
HBJH31	697753	9463	482 - 255	19215	Leu-18 to Leu-28, Leu-32 to Ala-60, Arg-69 to Gln-76.	L0748: 4 and H0318: 1.		
HBJH69	754891	9464	123 - 251	19216		L0748: 2 and H0318: 1.		
HBJH80	784267	9465	198 - 428	19217		H0318: 1, L0759: 1 and L0596: 1.		
HBJH73	971377	9466	241 - 1059	19218	His-8 to Gly-18, Thr-52 to Tyr-63, Tyr-93 to Gly-105, Arg-114 to Gln-130, Asn-139 to Cys-147, Cys-149 to Asp-159, Arg-196 to Trp-202.	AR050: 428, AR054: 421, AR051: 340 H0318: 1		
HBJH74	765380	9467	112 - 444	19219	Pro-4 to Leu-11, Gly-39 to Arg-53.	L0748: 2 and H0318: 1.		
HBJH20	907575	9468	125 - 298	19220		L0589: 2 and H0318: 1.		
HBJH04	882040	9469	171 - 347	19221	Ser-10 to Arg-15.	H0318: 1 and L0748: 1.		
HBJH96	828996	9470	237 - 437	19222	Arg-1 to Ser-6, Thr-28 to Trp-38.	H0318: 1 and L0759: 1.	120215, 120215, 190198	
HBJH02	919450	9471	202 - 321	19223	Gly-17 to Lys-27, Gln-30 to Val-35.	H0318: 1, L0766: 1 and L0608: 1.		
HBJGT03	923800	9472	35 - 226	19224	Ala-16 to Ser-22, Pro-31 to Leu-38, Ser-41 to Gly-48.	AR061: 5, AR089: 3 L0769: 2, H0318: 1 and L0787: 1.		
HBJFR45	722105	9473	309 - 518	19225	Gln-20 to Ser-34, Cys-53 to Asp-58.	H0318: 1, L0789: 1 and L0748: 1.		
HBJFQ08	959190	9474	139 - 339	19226		H0318: 1		
HBJFP52	728580	9475	165 - 362	19227	Asp-1 to Gly-6, Thr-38 to Arg-46.	L0439: 2 and H0318: 1.		
HBJFP08	959868	9476	191 - 388	19228	Arg-46 to Lys-51.	H0318: 1 and L0777: 1.		
HBJFK85	783432	9477	1 - 111	19229	Pro-20 to Ile-25.	L0439: 2 and H0318: 1.		



HBJFI48	847899	9478	271 - 483	19230		AR051: 32, AR054: 28, AR050: 23 H0318: 1		
HBJFI30	691056	9479	33 - 452	19231	Pro-1 to Trp-6, Glu-55 to Glu-64.	L0748: 2, L0740: 2 and H0318: 1.		
HBJFH60	740543	9480	242 - 388	19232	Ala-5 to Arg-14, Tyr-22 to His-28.	L0756: 4, L0600: 2, H0318: 1 and L0754: 1.		
HBJFH06	935587	9481	333 - 689	19233	Pro-8 to Ser-14, Asn-32 to Gly-38, Arg-75 to Ser-82, Ser-91 to Gln-96.	H0318: 1 and L0592: 1.		
HBJFD41	711591	9482	3 - 377	19234		L0608: 2, H0318: 1 and L0748: 1.		
HBJFD21	671205	9483	211 - 399	19235	Leu-3 to Gly-16.	L0766: 3, L0748: 3, H0318: 1, L0789: 1 and L0749: 1.		
HBJFC23	423885	9484	3 - 458	19236		AR061: 8, AR089: 4 L0439: 3 and H0318: 1.		
HBJFB10	968162	9485	44 - 259	19237		L0748: 2, H0318: 1 and L0749: 1.		
HBJEY89	787044	9486	104 - 322	19238	Asp-9 to Gly-26.	H0318: 1 and L0747: 1.		
HBJES09	487020	9487	66 - 272	19239	Asn-18 to His-23, Glu-38 to Glu-45.	H0318: 1		
	490958	9761	284 - 141	19513				
HBJEP70	757374	9488	283 - 471	19240	Glu-1 to Arg-8.	L0754: 2 and H0318: 1.		
HBJEN68	752251	9489	307 - 465	19241		L0748: 2 and H0318: 1.		
HBJEM45	722107	9490	49 - 153	19242		H0318: 1 and L0740: 1.		
HBJEL04	615515	9491	329 - 493	19243		L0748: 2 and H0318: 1.		
HBJEJ06	935967	9492	99 - 200	19244		H0318: 1 and L0748: 1.		
HBJEE72	766187	9493	2 - 184	19245		L0439: 2 and H0318: 1.		
HBJED51	485130	9494	3 - 206	19246		H0318: 1		
HBJED05	935058	9495	273 - 473	19247	His-4 to Leu-15.	S0005: 1 and H0318: 1.		
HBJEC67	573809	9496	160 - 438	19248	Arg-2 to Leu-9, Arg-38 to Cys-54.	H0318: 1		
HBJEA73	573834	9497	1 - 81	19249	Gly-1 to His-18, Ala-22 to Trp-27.			
HBJEA54	625943	9498	308 - 445	19250	Asn-35 to Arg-41.	H0318: 1		

HBJEA38	577103	9499	12 - 257	19251	Lys-1 to Glu-10.	L0749: 4 and H0318: 1.	
HBJEA37	839964	9500	1 - 108	19252	Lys-10 to Pro-20.	H0318: 1	
HBJEA13	419107	9501	56 - 268	19253		H0318: 1	
HBJDZ49	847928	9502	142 - 303	19254		L0758: 2, H0318: 1 and L0752: 1.	
HBJDR24	677407	9503	94 - 219	19255		H0318: 1 and L0748: 1.	
HBJDQ86	784654	9504	3 - 116	19256		H0318: 1 and L0756: 1.	
HBJDM70	757435	9505	313 - 399	19257	Leu-1 to Tyr-6.	H0318: 1 and L0754: 1.	
HBJDL24	678272	9506	180 - 440	19258	Glu-48 to Gly-53.	L0748: 3 and H0318: 1.	
HBJCV85	900955	9507	538 - 735	19259		AR054: 10, AR050: 8, AR051: 2	
						H0318: 1	
HBJCQ65	876430	9508	68 - 286	19260	Gly-35 to Ser-48.	H0318: 1, L0748: 1 and L0754: 1.	
HBJCJ82	779645	9509	315 - 479	19261		H0318: 1	
HBJCE07	954090	9510	1 - 132	19262	Glu-11 to Arg-19.	H0318: 1 and L0748: 1.	
HBJCB83	781411	9511	2 - 370	19263		H0318: 1 and L0748: 1.	
HBJBR04	847952	9512	115 - 309	19264		H0318: 1 and L0748: 1.	
HBJAP95	796659	9513	175 - 276	19265		H0318: 1 and L0752: 1.	
HBJAO55	732436	9514	40 - 171	19266	Thr-24 to Gly-37.	H0318: 1 and L0748: 1.	
HBJAJ49	723164	9515	320 - 439	19267		H0318: 1 and L0748: 1.	
HBJAI50	724619	9516	1 - 345	19268	Gly-32 to Tyr-41, Leu-64 to Asp-71.	L0731: 4, H0318: 1, L0783: 1, L0809: 1 and L0757: 1.	
HBJAH27	682941	9517	104 - 235	19269	Pro-29 to Pro-35.	H0318: 1	
HBJAE32	699695	9518	214 - 408	19270	Ile-3 to Leu-11, Lys-45 to Asp-50, Val-60 to Cys-65.	H0318: 1, L0664: 1, L0438: 1 and L0749: 1.	
HBJAB77	772422	9519	80 - 325	19271	Asn-17 to Trp-23, Ala-33 to Ile-47.	H0318: 1 and L0748: 1.	
HBJAB49	722195	9520	175 - 471	19272	Tyr-39 to Val-44.	L0766: 2, L0803: 2 and H0318: 1.	
HBJAB28	847966	9521	96 - 272	19273	Gly-38 to Lys-45.	H0318: 1 and L0485: 1.	
HBJAB15	660552	9522	31 - 390	19274	Glu-71 to Phe-79, Glu-98 to Ala-103, Ala-111 to Met-117.	H0318: 1 and L0759: 1.	

HBDAB47	720008	9523	364 - 486	19275	Phe-25 to Pro-34.	L0363: 1, L0766: 1, L0804: 1 and S0308: 1.		
HBDAD64	864344	9524	240 - 548	19276	Gln-8 to Trp-30, Arg-77 to Val-95.	L0754: 2 and S0308: 1.		
HBDAD16	661560	9525	260 - 388	19277	Tyr-2 to His-10.	L0809: 1, L0748: 1 and S0308: 1.		
HBCCO10	963157	9526	184 - 372	19278	Thr-30 to Gln-37, Gln-42 to Arg-49.	L0749: 2 and H0370: 1.		
HBCCJ05	930956	9527	72 - 365	19279	Pro-5 to His-14, Ser-58 to Ala-66.	H0370: 1 and L0748: 1.		
HBCCE11	965869	9528	336 - 527	19280	Arg-9 to Cys-21, Pro-35 to Trp-41.	H0370: 1, L0766: 1 and L0803: 1.		
HBCCD06	938319	9529	1 - 408	19281	Arg-1 to Glu-6, Ala-10 to Ala-15, Ala-35 to Ser-43.	H0370: 1 and L0759: 1.		
HBCCB51	975256	9530	48 - 227	19282	Lys-46 to Gly-60.	H0370: 1		
HBCBR08	958151	9531	3 - 428	19283	Pro-18 to Gln-23, Pro-72 to Gln-81, Pro-87 to Ser-93, Asp-112 to Leu-119, Pro-121 to Ala-135.	H0370: 1 and L0766: 1.	16q22.1	103850, 114835, 116800, 140100, 140100, 192090, 192090, 192090, 192090, 245900, 245900, 276600, 600223
HBCBN51	952057	9532	358 - 738	19284	Arg-7 to Ser-19, Leu-97 to Ala-106.	AR089: 28, AR061: 8, L0143: 2, H0370: 1 and L0595: 1.		
HBCBN06	934110	9533	25 - 231	19285		H0370: 1 and L0748: 1.		
HBCBG04	926761	9534	213 - 596	19286	Lys-13 to Leu-18.	L0749: 2 and H0370: 1.		
HBCBF12	969578	9535	1 - 225	19287		H0370: 1, L0659: 1 and L0758: 1.		
HBCBE57	848322	9536	426 - 677	19288	Gly-51 to Gly-56, Pro-62 to Gly-74.	H0370: 1, L0748: 1, L0749: 1 and L0591: 1.		
HBCBB22	848325	9537	566 - 868	19289		H0370: 1, L0744: 1, L0779: 1, L0777: 1 and L0601: 1.		
HBCAW52	573919	9538	65 - 247	19290	Pro-7 to Pro-19, Ser-26 to Gly-34.	H0370: 1		

HBCAT10	968195	9539	84 - 218	19291	Tyr-9 to Gly-15, Lys-34 to Gln-41.	H0370: 1 and L0759: 1.		
HBCAS32	699489	9540	106 - 264	19292	Leu-1 to Gln-6, Pro-13 to His-18, Arg-35 to Val-43.	H0370: 1 and L0744: 1.		
HBCAQ85	783431	9541	2 - 307	19293	Gly-18 to Pro-24, Pro-26 to Gln-41.	L0439: 2 and H0370: 1.		
HBCAQ42	864356	9542	182 - 430	19294	Arg-8 to Asp-17.	H0370: 1 and L0365: 1.		
HASCG58	738423	9543	21 - 236	19295		L0748: 3, L0731: 2, H0274: 1 and L0754: 1.		
HASAW90	789112	9544	494 - 655	19296	Asn-27 to Ser-38.	L0740: 2, L0758: 2, H0004: 1 and L0439: 1.		
HASAR74	879377	9545	745 - 1068	19297		H0004: 1		
	883501	9762	251 - 643	19514				
HASAC10	968746	9546	3 - 287	19298	Arg-30 to Tyr-38, Met-71 to Arg-76, His-78 to Val-86, Glu-89 to Gly-95.	H0004: 1, L0639: 1, L0748: 1 and L0779: 1.		

- [044] The first column in Table 1A provides a unique "Clone ID NO:Z" for a cDNA clone related to each contig sequence disclosed in Table 1A. This clone ID references the cDNA clone which contains at least the 5' most sequence of the assembled contig and at least a portion of SEQ ID NO:X was determined by directly sequencing the referenced clone. The reference clone may have more sequence than described in the sequence listing or the clone may have less. In the vast majority of cases, however, the clone is believed to encode a full-length polypeptide. In the case where a clone is not full-length, a full-length cDNA can be obtained by methods known in the art and/or as described elsewhere herein.
- [045] The second column in Table 1A provides a unique "Contig ID" identification for each contig sequence. The third column provides the "SEQ ID NO:X" identifier for each of the immune/hematopoietic associated contig polynucleotide sequences disclosed in Table 1A. The fourth column, "ORF (From-To)", provides the location (i.e., nucleotide position numbers) within the polynucleotide sequence "SEQ ID NO:X" that delineate the preferred open reading frame (ORF) shown in the sequence listing and referenced in Table 1A, column 5, as SEQ ID NO:Y. Where the nucleotide position number "To" is lower than the nucleotide position number "From", the preferred ORF is the reverse complement of the referenced polynucleotide sequence.
- [046] The fifth column in Table 1A provides the corresponding SEQ ID NO:Y for the polypeptide sequence encoded by the preferred ORF delineated in column 4. In one embodiment, the invention provides an amino acid sequence comprising, or alternatively consisting of, a polypeptide encoded by the portion of SEQ ID NO:X delineated by "ORF (From-To)". Also provided are polynucleotides encoding such amino acid sequences and the complementary strand thereto.
- [047] Column 6 in Table 1A lists residues comprising epitopes contained in the polypeptides encoded by the preferred ORF (SEQ ID NO:Y), as predicted using the algorithm of Jameson and Wolf, (1988) Comp. Appl. Biosci. 4:181-186. The Jameson-Wolf antigenic analysis was performed using the computer program PROTEAN (Version 3.11 for the Power MacIntosh, DNASTAR, Inc., 1228 South Park Street Madison, WI). In preferred embodiments, polypeptides of the invention comprise, or alternatively consist of, at least one, two, three, four, five or more of the predicted epitopes as described in Table 1A. It will be appreciated that depending on the

analytical criteria used to predict antigenic determinants, the exact address of the determinant may vary slightly.

[048] Column 7 in Table 1A provides an expression profile and library code: count for each of the contig sequences (SEQ ID NO:X) disclosed in Table 1A, which can routinely be combined with the information provided in Table 4 and used to determine the normal or diseased tissues, cells, and/or cell line libraries which predominantly express the polynucleotides of the invention. The first number in column 7 (preceding the colon), represents the tissue/cell source identifier code corresponding to the code and description provided in Table 4. For those identifier codes in which the first two letters are not "AR", the second number in column 7 (following the colon) represents the number of times a sequence corresponding to the reference polynucleotide sequence was identified in the tissue/cell source. Those tissue/cell source identifier codes in which the first two letters are "AR" designate information generated using DNA array technology. Utilizing this technology, cDNAs were amplified by PCR and then transferred, in duplicate, onto the array. Gene expression was assayed through hybridization of first strand cDNA probes to the DNA array. cDNA probes were generated from total RNA extracted from a variety of different tissues and cell lines. Probe synthesis was performed in the presence of  $^{33}\text{P}$  dCTP, using oligo(dT) to prime reverse transcription. After hybridization, high stringency washing conditions were employed to remove non-specific hybrids from the array. The remaining signal, emanating from each gene target, was measured using a Phosphorimager. Gene expression was reported as Phosphor Stimulating Luminescence (PSL) which reflects the level of phosphor signal generated from the probe hybridized to each of the gene targets represented on the array. A local background signal subtraction was performed before the total signal generated from each array was used to normalize gene expression between the different hybridizations. The value presented after "[array code]:" represents the mean of the duplicate values, following background subtraction and probe normalization. One of skill in the art could routinely use this information to identify normal and/or diseased tissue(s) which show a predominant expression pattern of the corresponding polynucleotide of the invention or to identify polynucleotides which show predominant and/or specific tissue and/or cell expression. The sequences disclosed herein have been determined to be predominantly

expressed in immune/hematopoietic tissues, including normal and diseased immune/hematopoietic tissues (See Table 1A, column 7 and Table 4).

[049] Column 8 in Table 1A provides a chromosomal map location for certain polynucleotides of the invention. Chromosomal location was determined by finding exact matches to EST and cDNA sequences contained in the NCBI (National Center for Biotechnology Information) UniGene database. Each sequence in the UniGene database is assigned to a "cluster"; all of the ESTs, cDNAs, and STSs in a cluster are believed to be derived from a single gene. Chromosomal mapping data is often available for one or more sequence(s) in a UniGene cluster; this data (if consistent) is then applied to the cluster as a whole. Thus, it is possible to infer the chromosomal location of a new polynucleotide sequence by determining its identity with a mapped UniGene cluster.

[050] A modified version of the computer program BLASTN (Altschul et al., J. Mol. Biol. 215:403-410 (1990), and Gish et al., Nat. Genet. 3:266-272 (1993)) was used to search the UniGene database for EST or cDNA sequences that contain exact or near-exact matches to a polynucleotide sequence of the invention (the 'Query'). A sequence from the UniGene database (the 'Subject') was said to be an exact match if it contained a segment of 50 nucleotides in length such that 48 of those nucleotides were in the same order as found in the Query sequence. If all of the matches that met this criteria were in the same UniGene cluster, and mapping data was available for this cluster, it is indicated in Table 1A under the heading "Cytologic Band". Where a cluster had been further localized to a distinct cytologic band, that band is disclosed; where no banding information was available, but the gene had been localized to a single chromosome, the chromosome is disclosed.

[051] Once a presumptive chromosomal location was determined for a polynucleotide of the invention, an associated disease locus was identified by comparison with a database of diseases which have been experimentally associated with genetic loci. The database used was the Morbid Map, derived from OMIM™ (*supra*). If the putative chromosomal location of a polynucleotide of the invention (Query sequence) was associated with a disease in the Morbid Map database, an OMIM reference identification number was noted in column 9, Table 1A, labeled "OMIM Disease Reference(s)". Table 5 is a key to the OMIM reference identification numbers (column 1), and provides a description of the associated disease in Column 2.

**TABLE 1B**

Clone ID NO:Z	SEQ ID NO:X	CONTIG ID:	BAC ID: A	SEQ ID NO:B	EXON From-To
HAMHB21	11	961376	AL035530	19515	1-137 465-2035 2761-2939 3499-3663 3841-4296 5031-5501 5707-5905 5946-6330 6790-6899 6957-7401 7628-7818 7889-10548
HAMHB21	11	961376	AL035530	19516	1-577
HASAX16	12	573692	AL358796	19517	1-1065
HASAX16	12	573692	AL356513	19518	1-1281
HASAX16	12	573692	AL358796	19519	1-964
HASAX16	12	573692	AL356513	19520	1-540
HASAX16	12	573692	AL356513	19521	1-967
HASAY74	13	526312	AC006479	19522	1-1081
HASAY74	13	526312	AC006479	19523	1-1052
HASAY74	13	526312	AC006479	19524	1-117
HASAY89	14	958768	AC012580	19525	1-874
HASAY89	14	958768	AL133502	19526	1-874
HASAY89	14	958768	AC012580	19527	1-87
HASAY89	14	958768	AC012580	19528	1-1034 1426-2177
HASAY89	14	958768	AL133502	19529	1-1034 1426-2177
HASAY94	15	521835	AC022702	19530	1-220 2365-2620 2992-3310 3432-3987 4545-5235 5266-5325 5814-6468 6801-6965 7327-7763 7979-8172
HASAY94	15	521835	AC025796	19531	1-272
HASAY94	15	521835	AC024998	19532	1-272
HASAY94	15	521835	AL365438	19533	1-272
HASAY94	15	521835	AL390122	19534	1-272
HASAY94	15	521835	AL133216	19535	1-306 1488-1890 2450-2722 3082-3400 3526-4081 4304-5314
HASAY94	15	521835	AF198096	19536	1-308 1490-1896 2457-2728 2816-3407 3532-4087



					4313-5008 5584-6209
HASAY94	15	521835	AC024998	19537	1-592
HASAY94	15	521835	AC022702	19538	1-316
HASAY94	15	521835	AC025796	19539	1-592
HASAY94	15	521835	AL365438	19540	1-591
HASAY94	15	521835	AL390122	19541	1-592
HASAY94	15	521835	AL133216	19542	1-750
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